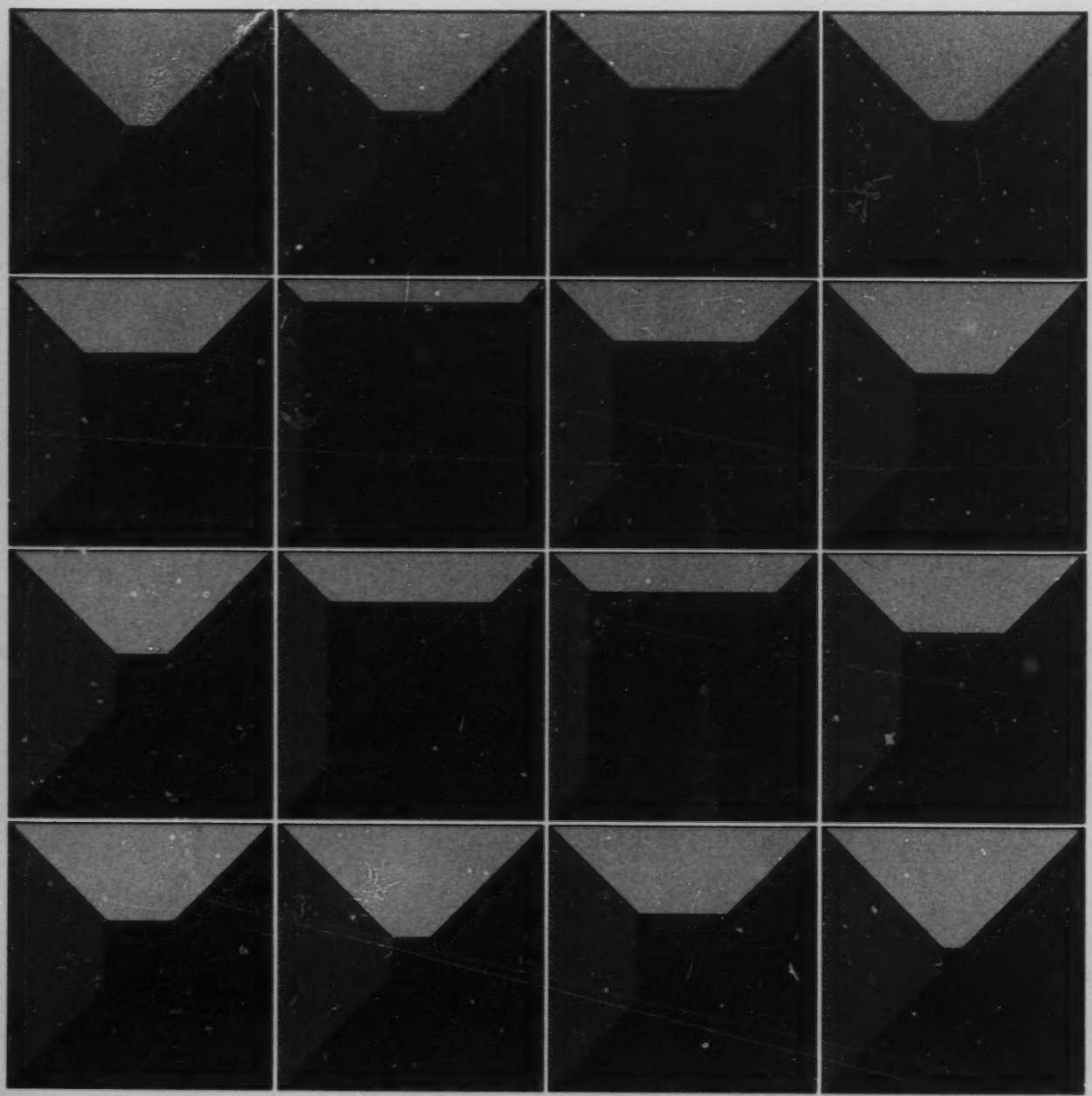
A CBO STUDY

The Industrial Policy Debate

December 1983

Congress of the United States
Congressional Budget Office



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THE INDUSTRIAL POLICY DEBATE

The Congress of the United States
Congressional Budget Office

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PREFACE

Much has been said and written on whether the United States should adopt a policy of assisting industrial development. This study, prepared at the request of the Office of the Senate Minority Leader, provides a framework for understanding the industrial policy debate, the economic changes that precipitated it, and the alternative policy options that have been proposed. In keeping with the mandate of the Congressional Budget Office (CBO) to provide objective analysis, the report makes no recommendations.

This paper was written by Elliot Schwartz of CBO's Natural Resources and Commerce Division, under the supervision of David L. Bodde and Everett M. Ehrlich. Michael Mandler contributed substantially to the analysis contained in Chapter II. Other research assistance was provided by Paul McCarthy, Julia McKenzie, Mark Adams, and Jim Simmons. The report benefited from many valuable comments on earlier drafts, particularly from Philip Webre, Louis Schorsch, Bob Dennis, Linwood Lloyd, Jeff Nitta, Steve Sheingold, Bob Hartman, George Iden, Steve Quick, Sally Ericsson, Ken Leventhal, Arnold Packer, Gerard Adams, and Howard Wachtel. Francis Pierce edited the manuscript, Philip Willis typed numerous drafts, and Kathryn Quattrone prepared it for publication.

Rudolph G. Penner
Director

December 1983

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SUMMARY

The term "industrial policy" represents not so much a policy as a debate over the best way to address America's long-term industrial problems. Everyone agrees that the country's basic manufacturing industries face both short-term and long-term difficulties. At issue is the role of government in addressing these difficulties and whether special programs that would complement fiscal and monetary policies would be appropriate. Supporters of a new, activist industrial policy would like the government to take a more interventionist role in solving industrial problems and rationalizing government policy toward industry. They hold that the present economic recovery, even at best, will not eliminate structural problems in the form of high unemployment, underutilized industrial capacity, and depressed communities. Supporters of a traditional free-market policy argue, on the other hand, that the government already intervenes too much and that intervention may represent part of the problem. They hold that industrial policy is inappropriate because economic growth can be maintained through conventional fiscal and monetary policy tools and flexible prices and wages. This paper examines the competing claims of alternative industrial policy proposals, evaluating their risks and benefits. It does not, however, try to choose among them.

Industrial policy proposals aim at three major goals: improving the economy's overall performance; meeting foreign competition; and assisting workers, firms, or communities to adjust to economic change. The pursuit of **overall goals** envisions improving total economic performance by overcoming problems in specific sectors and industries that affect employment, output, or prices. Some proponents go even further, arguing that government should take an active role in altering the structure of the economy. They would pursue **competitive goals** by promoting specific industries in competition with other nations. Finally, some have **adjustment goals**--that is, they would seek to ease the problems of workers, firms, or communities seriously affected by market-driven change. Such programs may be compared to the special policies developed to assist the agricultural sector in earlier years as the economy shifted to manufacturing.

The pursuit of these goals raises questions about the appropriate role of government in the economy. Public policy in the United States has traditionally been conceived as relying on private markets, although there has been a great deal of direct intervention. Industrial policy proponents suggest that the government should now intervene even more actively and

coherently in the affairs of particular industries and firms. They argue first that a formally even-handed approach is not really even-handed because some industries or firms benefit more from it than others, and second that considerable uncoordinated intervention already takes place. They recommend that the government should recognize the differential impacts of its present policies and go even further in the direction of targeting benefits to industry. In the extreme, this policy has come to be known as "picking winners and losers," although most proposals only seek to follow and build on market signals.

Many industrial policy proposals would seek to achieve a national consensus on economic goals by bringing government, labor, management, and other groups together to work out agreements on policy. Experience indicates that consensus building is a highly significant, although intangible, element of economic vitality.

THE CHANGING STRUCTURE OF U.S. INDUSTRY

Industrial policy proposals draw their impetus from the problems associated with adjusting to the long-term trends in the U.S. economy, which may not be amenable to resolution through fiscal and monetary policy or perfectly functioning private markets. These include: the expansion of the service sector relative to goods production; a slowing in productivity growth and in rates of capital investment; high levels of unemployment; greater cyclical instability, particularly in industries that are sensitive to interest rates and international trade; and an increasing openness of the U.S. economy to international trade and capital flows. But not all recent economic trends are bad. The economy has shown considerable strength in terms of overall growth in employment (despite high unemployment rates), a high absolute level of productivity compared to the rest of the world, and a leveling off in the decline of the U.S. share of world trade that occurred in the 1950s and 1960s. The bad news, however, remains sobering--particularly the declining rates of productivity growth and capital formation.

These trends seem to be related to major structural changes that have been taking place in the U.S. economy: the maturation of basic industries; increased international competition in domestic as well as foreign markets; a rapid expansion of the labor force; and the lingering effects of the oil crisis. These long-term trends are the focus of industrial policy concerns. Short-term difficulties caused by large budget deficits and tight monetary conditions are reserved for monetary and fiscal policy. For example, much of the present international trade difficulties can be attributed to overvaluation of the dollar, which in turn reflects unusually high real interest rates resulting, in part, from the high federal deficits projected for coming

years. Other trade difficulties may arise from adjusting to the long-term erosion in productivity and rising unit labor costs.

As industries mature, they tend to grow more slowly. This has been so for a number of U.S. manufacturing industries. In a healthy economy, new expanding industries can compensate for the long-term decline of older industries and lead to a new cycle of growth. Data on compositional change in the economy, however, indicate that the rate at which new industries are replacing older ones seems to have slowed during the 1970s, accounting in part for the economy's relatively poor performance.

Increased international competition is one factor accelerating the maturation of older industries and inhibiting the development of new ones. Competition comes not only from the highly developed European and Japanese economies but from newly industrializing nations. The diffusion of new technology abroad has become very rapid. The United States has thus lost much of its former predominance in world trade. Some U.S. industries have lost export markets and even part of their domestic markets to foreign competition, creating major problems of adjustment.

The expansion of the labor force in the 1970s also brought a number of economic problems. Although employment grew rapidly, the number of those seeking employment grew even faster. This also contributed to the difficulty of conducting economic policy, since efforts to increase employment ran counter to measures aimed at reducing inflation. In this perspective, the huge employment growth of the 1970s must be considered a major accomplishment.

The oil crises of the 1970s had direct, harmful effects on the U.S. economy, raising the rate of inflation and cutting real incomes. They also helped foreign competitors capture large portions of certain U.S. domestic and international markets, particularly in automobile production as Americans shifted to smaller cars that had been developed abroad. The resulting uncertainties, particularly reflected in high real interest rates, have led businesses to focus increasingly on short-term goals, making them hesitant to undertake new expansion.

These structural changes have contributed to the economic problems underlying much of the industrial policy debate, including: the broad-based slowdown in productivity growth; the increased instability of the economy during the 1970s; and the migration of population and employment from the old industrial areas of the Northeast and Midwest to the South and West.

CURRENT FEDERAL POLICIES TOWARD INDUSTRY

An industrial policy implies the formulation of goals for specific sectors or industries and coordinated efforts to achieve them. The United States does not have a unified industrial policy, although it has a potpourri of policies that affect industrial growth--often unintentionally. These include monetary and fiscal policies, credit subsidies, and specific features of tax laws, as well as policies in the areas of procurement, trade, research and development, economic adjustment, regional development, and competition. 1/

Procurement. Federal procurement of major equipment, most of it for defense, is estimated at $58.2 billion in fiscal year 1983. These purchases take major shares of output in some industries, such as aircraft and shipbuilding, and affect many others as well. Other important outlays go to public works infrastructure, costing $24 billion a year.

Trade. Trade programs seek either to promote exports or to inhibit imports. Credit subsidies through the Export-Import Bank, and tax benefits from Domestic International Sales Corporations, provide most of the impetus to increase exports. Protection against import competition is provided by a variety of tariffs, quotas, and regulations.

Research and Development. The Congress has supported research through a variety of tax subsidies and funding programs and through building facilities and testing prototypes, particularly in defense and energy projects. Support for R&D is usually justified on the ground that private firms tend to underinvest in these activities. Federal support has played a major role in the development of the agriculture, aerospace, communications, nuclear energy, and computer industries.

Economic Adjustment. Some federal programs seek to ease the process of adjusting to change. The Reconstruction Finance Corporation, established during the Depression, was one such program. The Job Training Partnership Act of 1982 established new programs to assist displaced workers, while Trade Adjustment Assistance provides some adjustment benefit to workers displaced by import competition.

Regional Economic Assistance. Various federal programs encourage economic development in particular regions or among targeted populations. These programs are uncoordinated and highly politicized.

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1. Many specific tax and credit programs are detailed in a forthcoming Congressional Budget Office publication on federal support of business.

Competition. The Congress has taken action to regulate competition in several distinct areas through antitrust laws and laws aimed at destructive competitive practices. It has also intervened to ensure that business practices reflect the public interest as they affect the environment and health and safety. These policies define the rules of competition and represent the most basic form of industrial policy.

ALTERNATIVE INDUSTRIAL POLICY STRATEGIES

A myriad of proposals have been made to establish a consistent industrial policy. Among them three broad categories of alternatives can be discerned:

- Leave the current policy framework intact. Rely instead on the standard instruments of fiscal and monetary policy to facilitate stable growth.

- Reform current policies that relate to industrial growth.

- Establish a new industrial policy institution. Three distinct, although not mutually exclusive, options for this are:

  --an information/consensus-building agency;
  --an executive-branch coordinating agency; and
  --a financial institution.

Staying with Current Policy Instruments

The current policy view of industrial problems is one of managing aggregate levels of investment, employment, and economic growth. It allows private markets to determine the composition of economic activity, and to resolve industry-specific problems. Essentially it relies on monetary and fiscal levers to guide the economy. There are also a large number of programs, such as those mentioned above, that assist or retard specific forms of industrial development, whether purposefully or not. These measures constitute an implicit industrial policy in that they affect incentives to work, save, and invest.

Proponents of current policy argue that further government intervention is unlikely to be successful, and that current problems are not so different from those of the past that they cannot be addressed within the current policy framework. To the extent that there are new problems, they can be handled by existing agencies such as the Departments of Commerce

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and Labor and the Council of Economic Advisers. According to this point of view, many of the industrial problems now faced by the United States are short-term in nature, a result of the recent recession, and will abate as economic growth takes hold. Longer-term problems are best addressed by private markets and existing institutions. This would avoid new government intervention, the creation of new government agencies, and the further intrusion of politics into economic decision making.

Against a reliance on current policies, it may be said that no matter how vigorous and sustained the current economic recovery proves to be, many long-term structural problems may remain. Productivity growth, for example, seems unlikely to return to historic levels. Unemployment rates are projected to remain high for the foreseeable future. The economy may undergo further structural changes that exceed the ability of free markets to adjust to them.

Moreover, many of today's problems are new, particularly the level and scope of international competition. It may be argued that new policy tools are necessary to avoid the kind of economic dislocation--such as the shift from agriculture to manufacturing--associated with previous structural changes in the economy.

Reforming Current Policy

Those who would reform current policy feel it is necessary to make American industry more competitive internationally by freeing it from certain domestic restraints. This option views industrial problems as caused by marginal imperfections in current laws and institutional practices.

For example, some believe that U.S. firms are at a disadvantage when competing with foreign firms that are able to merge or to form cartels. Moreover, some activities, in particular research and development, might be more efficiently carried out on a cooperative basis. This view calls for changes in the antitrust laws.

Efforts to reduce the burden of social regulation--such as consumer protection, environment, and job safety rules--are based on the belief that these regulations force industry to bear excessive compliance costs and hinder competitiveness. Other deregulatory proposals, such as repeal of the Glass-Steagall banking regulations, are aimed at changing the rules of competition in order to channel more funds into long-term investment.

Proposals to stimulate trade include greater funding for traditional export promotion programs as well as action to lower and stabilize the

foreign exchange rate of the dollar. Proposals to protect domestic industry from import competition include greater use of countervailing duties and passage of domestic content legislation for automobiles.

Programs have also been proposed to assist workers who are unemployed because of economic change. These programs include readjustment services to help dislocated workers find new jobs, wage subsidies to encourage employers to hire them, and additional income support to ease the difficulty of adjustment.

A strategy based on policy reform would have several potential advantages. Some would accrue from updating current policies to take account of economic changes that have made them out of date--for example, reforming antitrust laws and banking regulations that were developed under different economic conditions. At the very least, such reforms might lead to better competitive practices. Other advantages would include: effecting change with minimal budgetary costs (as through deregulation); improving U.S. competitiveness in specific product areas through export promotion; and avoiding further intrusion of the federal government into the marketplace.

Critics of this strategy call it an inadequate, piecemeal response to a complex set of problems. It would affect industrial policy concerns only indirectly, often more as a result of addressing other legitimate concerns such as deregulation. Moreover, some of the specific reforms might involve a cost to the general public by reducing competition and weakening consumer protection.

Establishing a New Institution

An Independent Information/Consensus-Building Agency. The least obtrusive of the proposed new agencies would be set up outside the executive branch to gather and disseminate information on the problems of industry, to develop consensus among opinion leaders, and to guide action. It would have no program to enforce. Some have proposed using such an agency as a means of working out an incomes policy through consensus agreements on wages and prices. One version would give it the power to spend public funds to help industries modernize along agreed-upon lines. In general, this approach presupposes that part of the problem of industrial competitiveness is a lack of market information.

The information/consensus agency is the least risky of the proposed new institutions, because it would have no administrative power. It would not interfere with private decision making or efficient resource allocation.

Rather, firms or groups might revise their intended actions as they saw fit on the basis of new information or after participating in consensus agreements.

To be successful, the agency would need to persuade a variety of competing interest groups to subscribe to a common understanding of the economy and to agree to the necessary policy measures. But its likelihood of success would be small, particularly if it had no financial assistance to offer and no ability to compel attention or action. The administrative costs of the agency might then exceed its social benefits. Comparable agencies in other industrialized nations have failed to accomplish much. Even where successful, as in Japan, the agency may have reduced adaptability to change because of the need for agreement before action.

A Coordinating Agency. This institution would coordinate and rationalize executive-branch programs, marshalling the resources of the federal government to address industrial problems. It would view the industrial problem as due, in part, to inadequate, conflicting, and poorly focused federal industrial programs. The Administration's proposed Department of International Trade and Industry (DITI) is one variation of such an agency.

Greater coordination of policy could lead to more effective assistance to industry. It could avoid inconsistencies between programs--for example, between free trade and economic adjustment policies. In addition, such an agency would provide a forum for discussion of problems and issues, and could inform the President about instances in which executive-branch programs and policies were working at cross-purposes.

On the other hand, a centralized agency for industrial policy might tend toward bureaucratic intervention into certain industries at the expense of the economy as a whole. Or it might add to the cumbersome nature of decisionmaking without improving the quality of decisions. Examples of the bureaucratic failure of centralized foreign industrial policy agencies abound, such as France's efforts in computers and aerospace.

A Financial Institution. This proposal calls for the creation of a national industrial development bank, which could target assistance to specific industries and offer financial aid to induce industrial change. Specific proposals vary in the powers and duties they would give the bank. Some would have it provide limited funds to industries in need of them, either to assist new industries or to revive declining ones. Others would give the bank greater funding as well as other powers, such as guaranteeing prices for new products.

The advantages of such a financial institution would lie in its ability to address structural problems that are outside the reach of fiscal, monetary, and existing policy instruments. It would be justified to the extent that the financial market fails to meet the capital requirements of industry, particularly the needs of distressed firms or regions, or to provide capital for the reorganization of troubled industries.

The key question about such an institution is whether it would yield better overall economic performance than the unassisted marketplace. A new institution, reallocating financial resources, could create serious inefficiencies if it were to make poor decisions. A related risk is that it would further politicize the economic system by introducing an element of political negotiation into economic decisions. This risk may be small if current policy is already seen as politicized by the numerous government involvements in the economy. A new institution might serve to make such involvement more consistent and straightforward if it replaced, but did not add to, some of the interventions under current policy. The capitalization of the institution would also be an important factor. A small development bank would have only marginal effects on resource allocation. A large, permanent institution would be likely to become a magnet for special-interest pleadings, and could provide an incentive for poorly managed firms to fail in such a way as to require bailing out.

Much would depend on whether the mission of the agency was defined as promoting growth industries or as subsidizing the restructuring of declining industries. Some would argue that promoting growth industries could contribute to higher output, productivity, and employment. But given the apparent willingness of U.S. capital markets to provide funds, these industries may not need financial assistance. If the mission was to restructure mature industries, the case for the agency would be its ability to promote actions that individual enterprises cannot pursue on their own, such as coordinated capacity reductions or industrywide modernization. A federal financial institution could enforce the necessary sharing of the burden, as the government was able to do in the Chrysler and New York City cases.

Such a financial institution would be under considerable political pressure. Rather than fostering industrial development, it could end up subsidizing inefficient industries to maintain employment. Extraordinary discipline would be required to avoid this--specifically, a firm policy of noninterference in the agency's decision making.

CONCLUSIONS

All of the options put forward carry economic or political costs that are not easy to assess in advance. A weakness of the industrial policy debate is that too much attention has been given to the competing proposals and not enough to defining the problems and the desired outcomes. As the Organization for Economic Cooperation and Development warned several years ago, the costs should be made as explicit as possible. 2/ "Careful attention should be paid to the cost to consumers of action which raises prices, to the cost to taxpayers, and to the effects of subsidized competition on employment elsewhere."

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2. Organization for Economic Cooperation and Development, The Case for Positive Adjustment Policies (June 1979).

CHAPTER I. INTRODUCTION AND OVERVIEW

This study examines the issues underlying the industrial policy debate. Among these are: what to do about industries that appear to be declining in international competitiveness; how committed the United States ought to remain to the principles of free trade; what actions, if any, to take to promote particular types of industry; how best to provide for the needs of workers and communities affected by plant closings; and to what extent government should be entrusted to make and carry out economic decisions for the common good. All of these questions come together under the rubric of "industrial policy."

THE INDUSTRIAL POLICY DEBATE

Much has been written about declining American industries and whether the federal government should actively promote industrial rebuilding. 1/ The debate has been fueled by the recent recession, with its impact on many manufacturing industries, although basic concerns go much deeper than that. On the one side stand supporters of a new activist industrial policy who would have government intervene more in support of business activity. On the other side stand those who would prefer to use current policy tools to achieve economic goals, together with free-market advocates who argue that the government already interferes too much in the economy and that it could aid business more by doing less.

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1. Ira Magaziner and Robert Reich, Minding America's Business (Harcourt Brace Jovanovich, 1982); Amitai Etzioni, An Immodest Agenda: Rebuilding America Before the Twenty-First Century (New Press, McGraw Hill, 1983); Barry Bluestone and Bennet Harrison, The De-Industrialization of America (Basic Books, 1982); Michael Wachter and Susan Wachter, eds., Toward a New U.S. Industrial Policy? (University of Pennsylvania Press, 1981), F. Gerard Adams and Lawrence R. Klein, eds., Industrial Policies for Growth and Competitiveness (Lexington Books, 1983); Ronald Muller, Revitalizing America: Politics for Prosperity (Simon and Schuster, 1980).

Definitions

The term "industrial policy" is so new to American economic discourse that it has yet to acquire a specific meaning. 2/ In its broadest sense, industrial policy encompasses everything that government does affecting business activity, from fiscal and monetary policy to Chrysler loan guarantees. But the term is not used to mean just any policy affecting industry. Rather, it implies: (1) a focus on long-term structural economic problems; and (2) an emphasis on industries or sectors of the economy, particularly on the manufacturing sector and its role in energizing the rest of the economy.

For the most part, industrial policy advocates concede that monetary and fiscal policies should remain predominant tools of economic management. However, to the extent that these are unable to ensure high employment or fail to stimulate long-term economic growth, industrial policies may be called upon to assist. Put differently, the argument for an industrial policy is that short-term problems, such as those caused by high interest rates or unfavorable exchange rates, are best addressed by macroeconomic policy, while long-run, secular problems may not be.

In the narrowest sense, industrial policy may be thought of as applying primarily to the manufacturing sector, including efforts to move resources into and out of manufacturing. In this sense it would be on a par with other sectoral policies toward agriculture, financial institutions, transportation, and energy. A broader conception takes the view that important economic developments cannot be neatly confined to individual sectors. The development of the computer industry, for example, has involved nearly all economic sectors. But the distinguishing feature of industrial policy is its structural emphasis. Where macroeconomic policy focuses on broad aggregates and on the cyclical behavior of the economy, industrial policy looks at the composition of the aggregates and at long-term growth.

Goals

Industrial policy advocates do not all share the same goals. Three major types of goals can be discerned in the emerging debate: improving overall economic growth; meeting foreign competition; and assisting workers and industries to adjust to economic change.

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2. For a useful classification of industrial policy definitions see F. Gerard Adams and Lawrence Klein, eds., Industrial Policies for Growth and Competitiveness, pp. 14-19.

Macroeconomic Goals. The recessions and inflation of recent years have led some to argue that policies aimed at particular industries or sectors would help the economy to perform better in terms of employment, output, and price stability. 3/ They believe that current monetary and fiscal policy is inefficient. When it attempts to stimulate the economy to induce growth, it overstimulates some sectors that may already be operating at full capacity and understimulates others, thus contributing to inflation and creating additional structural imbalances. A converse effect occurs when policy is disinflationary, as sectors with slack capacity become further depressed. Moreover, to the extent that unemployment reflects changes in the demand for labor by particular sectors rather than by the economy as a whole, targeted industry policies may be needed to address the problem. 4/

Some proponents go further, arguing that the government should as a matter of policy have goals for sectors or industries as well as for the economy as a whole. 5/ These goals would specifically target the number and types of jobs or products the economy should produce. Some proposals to "save" particular industries, such as steel and automobiles, fall into this category. In particular, these proponents would try to reverse the decline in the number of middle-income jobs.

Competitive Goals. The desire to meet foreign competition leads to two types of proposals. On the level of general economic policy, it is argued that because other nations have industrial policies, so should the United States. 6/ The argument is partly based on a broad view of historical

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3. See William Diebold, Jr., Industrial Policy as an International Issue (McGraw-Hill, 1980), pp. 248-56; and Marc Bendick, Jr., "A Federal Entrepreneur? Industrial Policy and American Economic Revitalization," Urban Institute Working Paper 1525-01, March 1981.

4. See David M. Lilien, "Sectoral Shifts and Cyclical Unemployment," Journal of Political Economy, vol. 90, no. 4 (1982).

5. This seems to be a major point in Felix Rohatyn's program. See for example, "Time for a Change," New York Review of Books, August 18, 1983, pp. 46-49. See also Samuel Bowles, David M. Gordon, and Thomas E. Weisskopf, Beyond the Waste Land (Anchor Press/Doubleday, 1983).

6. See for example, The Labor-Industry Coalition for International Trade, (LICIT), International Trade, Industrial Policies, and the Future of American Industry (1983).

necessity (the United States must keep pace with modern institutional developments or fall behind) and partly on the belief that if foreign governments are targeting our industries, we should retaliate.

On the level of specific products, the argument is more straightforward and more clearly protectionist. In order to remain competitive in certain products, especially in cases where other governments subsidize exports, the United States should provide both financial and technical assistance to industry. 7/ The argument recognizes that consumers may benefit in the short run from imports subsidized by foreign governments, but holds that protection is justified by short-run adjustment problems caused by changes in foreign subsidies and by long-run considerations of maintaining a national industrial base and promoting competition. In addition, some argue that the government should assist vital domestic industries for reasons of national security.

Adjustment Goals. A third industrial policy goal is to assist workers, firms, or communities in adjusting to economic change. 8/ Its exponents point out that this was done for the agricultural sector (for example, the commodity support and agricultural credit programs) when it experienced disruptions as resources were shifted from agriculture to manufacturing, largely as a result of vastly improved efficiency in agriculture and increased demand for labor in manufacturing. Between 1920 and 1947, total farm employment declined from 13.4 to 10.4 million. Now some manufacturing industries are also experiencing employment declines, although they differ in pace, scope, and magnitude. Total employment in steel, for example, fell from 584,000 in 1965 to 289,000 in 1982. Assisting the adjustment does not necessarily call for heavy government intervention. Some argue that the best approach would be to help speed up the process of change so the economy can more rapidly move to higher levels of productivity and efficiency, while ameliorating (or compensating) the pain of those who are adversely affected--for example, by giving adjustment assistance to unemployed workers. 9/ Others argue that changes are taking place too fast for

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7. This argument also occurs in the LICIT study cited above, as well as in the petitions of Houdaille, Inc., the Machine Tool Builders Association, and numerous other firms filing with the International Trade Commission for protection against imports.

8. See for example, Magaziner and Reich, Minding America's Business, pp. 343-50. See also Lester Thurow, The Zero-Sum Society (Basic Books, 1980).

9. See Lester Thurow, The Zero-Sum Society.

individuals and communities to adjust and that government policy should try to slow down or, in extreme cases, even reverse the process of change. This might involve supporting industries that are now in decline, but that represent key linkages in the economy. 10/

What Role for Government?

The debate over industrial policy raises the question of what the legitimate mission of government should be vis-a-vis the economy. Since World War II, the Congress has given the federal government responsibility for creating and maintaining high levels of employment in the economy through fiscal and monetary policy. This role was reinforced and broadened by the Full Employment and Balanced Growth Act of 1978. Now the question is being posed whether government should take an even stronger and more interventionist role--a role that runs counter to many traditional American beliefs.

The debate is not new, even in the United States. Alexander Hamilton argued forcefully in his Report on Manufactures (1792) for a strong government role in the encouragement of U. S. industry. He opposed the popular theories of Adam Smith (The Wealth of Nations, 1776)--"that industry, if left to itself, will naturally find its way to the most useful and profitable employment" as if guided by an invisible hand to promote the general welfare. Hamilton offered four arguments against Smith: (1) that inhibitions and reluctance to change would prevent a spontaneous transition to new pursuits; (2) that the risk of failure in new endeavors would deter experimentation; (3) that infant U.S. industries could not be expected to compete effectively with mature foreign firms on equal terms; and, what Hamilton regarded as most important, (4) that other nations already offered subsidies and inducements to manufacturers that made competition unfair.

The debate is now being revived in a new context. Global recession has led many national governments to protectionist measures. In addition, increasing instability in the industrialized economies during the 1970s has made it riskier for businesses to take the initiative in adjusting to long-term changes in the structure of the economy. Moreover, the social cost of making such adjustments is high, as seen in double-digit unemployment rates

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10. Felix Rohatyn makes this point in "Time for a Change" and numerous other articles and speeches.

and communities shattered by plant closings. It is natural to look for remedies in a better and more coherent government policy toward industry. 11/

Those who favor such a policy have to reckon with the anti-interventionist tradition in America. Unlike countries such as Japan and France, which have strong traditions of government direction of economic activity, each new proposal in the United States for government intervention revives a national debate on the extent to which government should be entrusted to make and carry out economic decisions. Government intervention in economic activity is generally recognized as being legitimate at the macroeconomic level in an effort to smooth business cycle fluctuations, curb inflation, promote income equality, and seek a high level of output and income, although even these goals are questioned by many who doubt government's ability to accomplish them. Also recognized, but more controversial, is the role of government as the regulator of economic activity in certain limited areas (such as antitrust legislation, public utility regulation, and equal opportunity requirements). But even at the macroeconomic level, the role of government is strictly circumscribed. In general, it is held that government should be even-handed; it should not tilt the playing field for some special interests and against others. Where the government must intervene, it should do so in the least obtrusive way. While these goals are often honored more in the breach than in the practice, the preference for markets and against unneeded intrusion by government is pervasive.

The new industrial policy activists, who would have the government target help to individual industries and firms, justify their stance on several grounds. First, they argue that some macroeconomic policies are not as even-handed as they appear to be. For example, the accelerated depreciation schedules created under the Economic Recovery Tax Act of 1981 (ERTA) may not have benefited the fast-changing high technology industries as much as some other industries. The electronics industry, for example, claims that it must depreciate equipment faster than the tax law now allows, because of rapidly changing technological advances, and that the old rules were more favorable. Clearly the system introduced under ERTA had the unintended effect of benefiting some industries more than others. By the same token, monetary policy has different effects on industries with different capital intensities and whose sales respond differently to changes in interest rates.

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11. Along with this, however, has gone a movement toward industrial deregulation and the removal of government subsidies and other interventions that distort economic incentives.

Second, the interventionists note that the government also intervenes purposefully on the microeconomic level: through subsidized loan programs, encouragement of certain activities such as housing and medical care, farm price supports, tax incentives, and industry regulation. Such intervention has existed throughout American history.

On this basis, many activists would recommend that the government explicitly target industries or sectors rather than continue with ad hoc, piecemeal approaches. Some have even spoken of "picking winners and losers"--that is, helping firms that hold the most promise of success and rejecting those that are uncompetitive. Few would go this far, however; most would work with the competitive market, which itself determines survivors and decliners. Some also base their case on the traditional argument that government should help industries jeopardized by foreign competition. Specifically, they propose targeted subsidies to firms that are threatened by competition from foreign firms receiving unfair government assistance. Such intervention is held to be most effective on a case-by-case basis, matching countervailing assistance for domestic industry with foreign government subsidies to foreign firms.

At the core of these arguments is the issue of who should make economic decisions and who should bear the burden of risk. Free-market proponents argue that risk-bearing and decision making should be spread widely through the economy. They emphasize the advantage in having decisions made by those close to the scene of economic activity, who have an immediate stake in economic efficiency. They also see this as a hedge against the concentration of power in a few key centers, particularly in the government. They agree with Adam Smith that the individual pursuit of self-interest is the best determinant and provider of the public good. They also argue that if foreigners wish to subsidize exports to the United States, Americans should be content to enjoy the advantages of their generosity. The interventionists, on the other hand, lean toward the Hamiltonian view that today's industrial problems are too great to be borne by the individual enterprise alone. They would have government share some of the risks and make some of the decisions.

Those favoring a free market would argue that the burden of proof in this debate lies with the interventionists. Recent economic history demonstrates that economic problems may be more intractable than is commonly perceived, and that government may have less control over economic events, even at the macroeconomic level, than would be required for an interventionist industrial policy to succeed.

The Development of Consensus

To some extent, the industrial policy debate is really about a search for consensus on long-term economic policy direction. Economic policies need public support if they are to succeed. In the United States, the high-growth years of the 1960s coincided with (among other things) a consensus on the need to "get the economy going again." This period also saw the country engaged in putting a man on the moon, with the synergistic effects on industry resulting from that program. In Japan, Germany, and elsewhere, high-growth economic programs are associated in the public mind with national renascence and "catching up to the United States."

One reason the current industrial policy debate lacks focus is the apparent disagreement among important groups on economic goals and the means to carry them out. The Keynesian consensus for managing the economy through fiscal policy began to evolve in the United States during the Great Depression and reached its height in the 1960s. It has been shaken by recent events, particularly the inability of conventional policy to address high inflation and high unemployment simultaneously. Frequent shifts in policy have created uncertainty and instability, thereby impeding sustained economic growth. The effects can be seen in high interest rates and the tendency of many firms to postpone long-term commitments.

The industrial policy debate offers several potential avenues for policy consensus. At one end of the spectrum are those who believe they know the direction in which the United States should be heading and advocate new institutions and policies to help it get there. At the other end are some who are less certain of solutions but suggest ways to develop new directions. The first group assumes a new consensus is emerging. The second sees no consensus developing as yet, but recognizes the need for one and therefore seeks to create new institutions and mechanisms for building it. The continuum between these extremes is filled with industrial policy proposals of various kinds.

PLAN OF THE STUDY

This study seeks to provide a framework for the industrial policy debate by first reviewing the economic changes that have precipitated the concern over America's industrial strength and then analyzing policies that would address the problem. The changing structure of U. S. industry is discussed in Chapter II. The ways in which the government now intervenes in markets to address economic problems are examined in Chapter III. Chapter IV describes alternative strategies: (1) to stay with current policies and rely on the benefits of sustained economic recovery to resolve industrial

problems; (2) to adapt existing policies to changing conditions; and (3) to develop new institutions to address industrial problems, establishing a new national policy toward industry. Chapter V evaluates these choices, with particular emphasis on the following questions:

- To what extent would a given policy address structural economic problems?
- To what degree might it politicize economic decision making?
- What would be the consequences if it failed?

CHAPTER II. THE CHANGING STRUCTURE OF U.S. INDUSTRY

In recent years the U.S. economy has tended to become increasingly a service economy. The production of goods, while growing, has become a smaller part of total economic activity. This is not bad in itself. The U.S. standard of living remains among the highest in the world, and more Americans are working today than ever before. Still, high levels of unemployment, together with declining rates of productivity growth, raise questions about the future. This chapter examines some of the recent changes in the economy and their origins.

OVERVIEW

The most obvious change in the structure of the economy, as shown in Table 1, is in the proportions of final demand devoted to goods and services. In 1950, the goods/services ratio stood at 1.8:1. By 1980 it had fallen to half that, or 0.9:1. Over the last 30 years the value added by manufacturing as a percent of GNP has shown a steady decline, while finance and other services have increased (see Table 2). A comparable decline has taken place in manufacturing employment as a percent of total industry employment (see Table 3). The actual number of employees working in the manufacturing sector has remained about the same since 1969, while employment has increased in finance, services, trade, and government.

Such changes are not new in the history of the U.S. economy. The sectoral shift out of manufacturing and into services can be put in perspective by comparing it to the movement from agriculture to manufacturing earlier in the twentieth century. In 1920-1947 agricultural employment fell from 26.6 percent of total employment to 14.3 percent, or by an average of 1.7 percent per year. In a comparable span of time, 1950-1977, manufacturing employment declined from 29.1 percent to 22.0 percent of total employment, or by an average of 0.9 percent yearly. Of more significance is the drop in the rate of productivity growth (that is, the rate of increase in goods and services produced per hour worked) in the postwar period, especially in the last ten years. This rate has declined from 3 percent in 1948-1973 to less than 1 percent in 1973-1981.

The United States is now more closely tied to the international economy. As shown in Table 4, the share of GNP accounted for by imports and exports of goods has increased dramatically in the last 30 years. The

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TABLE 1. GROSS NATIONAL PRODUCT BY MAJOR TYPE OF PRODUCT, 1950-1980 a/

	1950	1955	1960	1965	1970	1975	1980
Total GNP (In billions of nominal dollars)	286.5	400.0	506.5	691.1	992.7	1,549.2	2,631.7
Goods (In billions of nominal dollars)	162.4	214.5	254.2	338.4	459.9	694.0	1,140.6
Services (In billions of nominal dollars)	88.5	136.1	193.8	273.3	429.9	705.2	1,225.2
Structures (In billions of nominal dollars)	35.6	49.5	58.5	79.3	102.9	150.0	265.9
Goods/ Services (ratio)	1.8	1.6	1.3	1.2	1.1	1.0	0.9

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts.

a. As measured by final demand.

TABLE 2. SECTORAL COMPOSITION OF GROSS NATIONAL PRODUCT, a/ 1951-1977 (In percent) b/

Sector	1951	1955	1959	1964	1971	1977
Manufacturing	29.8	30.2	29.0	28.1	24.6	24.2
Other Goods Industries	14.9	12.7	11.3	10.1	9.4	9.8
Finance, Insurance, and Real Estate	10.6	12.5	13.8	14.3	14.5	14.4
Public Utilities, Transportation, and Communications	8.8	8.9	9.0	8.8	8.7	8.9
Wholesale and Retail Trade	17.0	16.6	16.8	16.4	16.8	16.8
Services c/	7.8	8.5	9.5	10.2	11.5	12.2
Government and Government Enterprises	9.3	9.6	10.2	11.2	13.2	12.4
Not Classified (Incl. error)	1.6	1.0	0.4	0.9	1.2	1.3
Total GNP d/	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: U. S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts.

a. As measured by gross product originating in each sector.

b. The years chosen are midway between the peaks of the business cycle, to minimize cyclical distortion.

c. Services are defined in the narrow sense of lodging, repair services, professional and business services, etc.

d. Columns may not add to 100 because of rounding.

TABLE 3. SECTORAL COMPOSITION OF EMPLOYMENT, 1951-1977
(In percent)

Sector	1951	1955	1959	1964	1971	1977
Manufacturing	29.1	28.7	27.0	25.8	23.4	22.0
Other Goods Industries	10.8	10.0	9.5	8.5	7.3	7.1
Finance, Insurance, and Real Estate	3.5	3.9	4.2	4.4	4.7	5.1
Public Utilities, Transportation and Communications	7.6	7.1	6.5	5.9	5.6	5.2
Services	13.1	13.8	15.4	16.6	17.5	19.1
Wholesale and Retail Trade	17.6	17.7	18.0	18.4	19.6	20.8
Government and Government Enterprises	18.5	19.1	19.6	20.6	21.8	20.6
Total a/	100.0	100.0	100.0	100.0	100.0	100.0
Employment (In millions)	56.4	59.1	61.5	67.1	79.4	89.6

SOURCE: U. S. Department of Labor.

a. Columns may not add to 100 because of rounding.

TABLE 4. MERCHANDISE EXPORTS AND IMPORTS, 1950-1980

Year	Exports		Imports		Trade Balance	
	In Billions of Dollars	Percent of GNP	In Billions of Dollars	Percent of GNP	In Billions of Dollars	Percent of GNP
1950	10.20	3.6	-9.08	-3.2	1.12	0.4
1955	14.42	3.6	-11.53	-2.9	2.90	0.7
1960	19.65	3.9	-14.76	-2.9	4.89	1.0
1965	26.46	3.8	-21.51	-3.1	4.95	0.7
1970	42.47	4.3	-39.87	-4.0	2.60	0.3
1971	43.32	4.0	-45.58	-4.2	-2.26	-0.2
1972	49.38	4.2	-55.80	-4.7	-6.41	-0.5
1973	71.41	5.4	-70.50	-5.3	0.91	0.1
1974	98.31	6.9	-103.65	-7.2	-5.34	-0.4
1975	107.09	6.9	-98.04	-6.3	9.05	0.6
1976	114.75	6.7	-124.05	-7.2	-9.31	-0.5
1977	120.82	6.3	-151.69	-7.9	-30.87	-1.6
1978	142.05	6.6	-175.81	-8.1	-33.76	-1.6
1979	184.47	7.6	-211.82	-8.8	-27.35	-1.1
1980	220.10	8.4	244.20	-9.3	-24.1	-0.9

SOURCE: U. S. Department of Commerce, Bureau of Economic Analysis.

impact of this change has been accentuated by a tendency of imports to rise faster than exports, resulting in a large merchandise trade deficit in recent years.

The rest of this chapter discusses the changing structure of the economy in terms of a few key elements: the maturation of basic industries; increased international competition; the expansion of the labor force in the 1970s; the effects of the oil crises; a slowdown in productivity and capital formation; heightened cyclical fluctuations; and geographic changes in production and employment.

THE MATURATION OF BASIC INDUSTRIES

As industries mature, they tend to grow more slowly and in some cases their output even declines. When the history of goods-producing industries is examined, a common pattern is often observed. In the first phases of the development of a product, growth may be slow because the product is expensive and not yet integrated into consumption habits. But as its technology advances, it can experience rapid and self-reinforcing growth: production becomes standardized, resource bottlenecks are overcome, and economies of scale are realized. This pattern can be observed in most industries, from the move to mass production at Ford in 1913 to the development of the 64K RAM semiconductor circuit of today. Eventually the opportunities for incremental technical innovation may become exhausted, demand may be saturated, and the product may decline in its importance to the economy. Maturation can take the form of a stabilization of the product's share of output or a decline relative to the production of other goods. Some goods--such as the vacuum tube radio--undergo absolute declines as they are displaced by new production methods or products. 1/

The maturation of older industries may be offset by the rise of new industries with a large potential for productivity growth. Since productivity growth has slowed in recent years, it would be easy to assume that many U.S. industries have reached their mature phase, and that there is a lack of new high-growth industries. The decline of industries is not inexorable, however. New technological innovations can lead an industry into a new

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1. This pattern of development is sometimes termed the "product life-cycle," and is described in greater detail in Raymond Vernon, "International Investment and International Trade in the Product Cycle," Quarterly Journal of Economics, vol. 80 (May 1966), and William Abernathy, The Productivity Dilemma: Roadblock to Innovation in the Automobile Industry (Johns Hopkins University Press, 1972).

cycle of growth. Some writers have speculated that robotics may revive many consumer durables industries by improving efficiency. 2/

The life-cycle view of industrial evolution suggests that a healthy economy is one in which new industries and technologies continually supplant older and stagnating ones. Data on the changing composition of output support the idea that the economy's present problems are related to a decline in the rate at which new industries are replacing older ones. An index of the rate at which the sectors are changing--that is, a measure of economic dispersion--can be constructed by summing the changes (without regard to whether the changes are pluses or minuses) in the percentage share of the output (measured by value added) of each sector. This measure of dispersion is presented in Table 5. 3/

The data indicate that the rate of dispersion in the highly aggregated sectoral level of the economy (that of the one-digit standard industrial classification) fell steadily after 1951, and that the decline accelerated in the 1970s when it dropped from 1.17 to 0.50. While the steadiness of the decline may be something of a statistical accident, the decline itself is undeniable. To generalize, the data indicate that the United States is not currently undergoing rapid sectoral change and that a mature service economy may already be at hand. This should not be read to imply that industrial change did not occur during the 1970s. Slowing the rate of change in output shares (as measured by Table 5) had perceptible effects on overall economic growth and did not negate many of the employment dislocations that occurred during the same period.

This highly aggregated evidence masks what is happening to specific industries. Table 6 shows the composition of manufacturing output at the two-digit Standard Industrial Classification level, that is, the rate of dispersion within manufacturing. In the durable goods sector one notes in particular the downward trend in primary metals (such as iron and steel foundries, and other smelting and refinery operations). This is the epitome of a mature industry in the United States; most of the innovation in the postwar period has been undertaken in foreign countries, where governments

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2. See William J. Abernathy, Kim B. Clark, and Alan Kantrow, Industrial Renaissance: Producing a Competitive Future for America (1983) for a general discussion of "de-maturity" and a detailed look at the possibilities for the auto industry.

3. Measures of dispersion such as this are affected by the level of aggregation. Many of the changes within aggregated categories will offset each other, reducing the net measured change.

TABLE 5. SECTORAL DISPERSION OF GROSS NATIONAL PRODUCT, 1951-1977

	1951-1955	1955-1959	1959-1964	1964-1971	1971-1977
Annualized Dispersion Rate a/	1.52	1.45	1.22	1.17	0.50

Source: Table 2.

a. The measure sums the absolute values of the changes in the percentage shares of output of all sectors, and converts the sum into an annual average. The formula for the measure is:

$$\frac{\sum_i \left| \frac{S_t^i}{GNP_t} - \frac{S_{t-n}^i}{GNP_{t-n}} \right|}{n}$$

where S_t^i = the production of sector i in year t

GNP_t = the gross national product in year t

n = the number of years in the period

The measure is equivalent to summing the absolute values of the rates of growth of the shares of output of all sectors, with each sector weighted by its share of output.

TABLE 6. INDUSTRY COMPOSITION OF MANUFACTURING OUTPUT, 1951-1977 (Percentages of total value of output)

	1951	1955	1959	1964	1971	1977
Durable Goods						
Lumber and wood	3.8	3.2	3.0	2.9	3.0	3.2
Furniture	1.7	1.6	1.6	1.6	1.6	1.5
Stone, clay, and glass	3.5	3.8	3.8	3.5	3.4	3.2
Primary metals	10.0	9.4	8.4	8.1	6.7	6.9
Fabricated metals	7.3	7.1	7.1	7.2	7.5	7.6
Machinery	10.1	8.9	9.5	10.5	10.5	11.9
Electrical machinery	6.3	6.5	8.2	8.1	8.9	8.7
Motor vehicles	7.0	8.8	6.4	7.6	7.8	8.1
Transportation equipment	3.9	5.6	6.2	6.4	5.3	4.7
Instruments	2.0	2.2	2.6	2.6	2.9	2.9
Miscellaneous	2.0	1.9	1.9	1.7	1.8	1.7
Subtotal	57.5	59.2	58.8	60.3	59.4	60.4
Dispersion rate a/		1.73	1.73	0.70	0.63	0.57
Nondurable Goods						
Food products	9.1	9.6	9.7	9.1	8.9	8.1
Tobacco	.6	.7	.8	.8	.8	.7
Textile products	5.6	3.9	3.6	3.4	3.4	3.0
Apparel products	4.3	3.9	3.8	3.9	3.9	3.3
Printing and publishing	3.7	3.5	3.7	3.6	3.7	3.7
Paper products	4.4	4.8	5.1	5.4	5.5	5.1
Chemical products	6.5	6.7	7.3	7.2	7.4	7.4
Petroleum products	4.6	4.4	3.6	2.8	3.1	4.5
Rubber and plastic	2.2	2.1	2.4	2.5	3.0	3.0
Leather products	1.5	1.3	1.3	1.2	1.0	.7
Subtotal	42.5	40.8	41.2	39.7	40.6	39.6
Dispersion rate a/		1.00	0.70	0.52	0.23	0.67
Total b/	100.0	100.0	100.0	100.0	100.0	100.0
Total dispersion rate a/		2.73	2.43	1.22	0.86	1.24

SOURCE: U. S. Department of Commerce, Bureau of Economic Analysis.

a. Annualized rates. See note to Table 5 for the explanation and general formula used for rates of dispersion. The rates presented for durables and nondurables use percentages of total manufacturing output and can be thought of as the contribution of each sub-group to total manufacturing dispersion.

b. Numbers may not add to totals because of rounding.

have heavily subsidized steel production. Machinery (including engines and turbines, construction and mining equipment, and machine tools), electrical machinery (including electronic transmission equipment, household appliances, communication equipment, and semiconductors), and manufacturing instruments (including scientific and research instruments, and optical and medical instruments) show significant long-term increases in their share of manufacturing output. These growing sectors have enjoyed considerable technical advances, and the demand for their products has increased as their costs have declined. (It is interesting to note that fabricated metals, including structural metal products, screw machine products, and metal forgings and stampings, showed a surprisingly stable, if not upward, trend in their share of manufacturing output.) The share of motor vehicles remained fairly steady, if not upward in trend, until the late 1970s, but was severely affected by the 1981-1982 recession, and the industry's future is uncertain. Table 6 shows that the rate of dispersion for durable goods has fallen over time, while industry shares have stabilized.

Similar patterns can be seen in nondurable goods production. Textiles, apparel, and leather production show marked decreases over the period. Again, these are classic examples of mature industries. Chemical and petroleum production, on the other hand, show significant increases in percent of manufacturing production, although the rising share of petroleum in 1977 is mainly attributable to rising oil prices. The rate of dispersion in non-durable goods in the 1970s does not show the same pattern of steady decline that has been exhibited by other industry groups, again partly because of the rise in oil prices.

INCREASED INTERNATIONAL COMPETITION

As shown earlier, in Table 4, international competition is now of greatly increased importance to the U.S. economy. After World War II, U.S. exports represented less than 4 percent of its GNP, but they dominated worldwide trade volume. Now exports are more important to the U.S. economy, but represent a lower percentage of world trade.

The loss of export markets, and often the loss of part of the domestic market to imports, has been caused by both internal and external events. Internally, U.S. trade problems can be traced partly to the problems of maturing industries and partly to high production costs relative to international competitors. In some cases U.S. firms have begun producing abroad to achieve lower costs. This is consistent with the life-cycle view, which holds that, as an industry matures and its technology becomes

TABLE 7. STEEL INDUSTRY HOURLY EMPLOYMENT COSTS IN THE UNITED STATES AND FOUR OTHER COUNTRIES

	United States	Japan	West Germany	France	United Kingdom
Absolute Levels (In current dollars)					
1969	5.54	1.65	2.36	2.19	1.66
1972	7.33	2.86	4.24	3.46	2.62
1975	10.83	5.54	7.61	7.23	4.57
1978	14.73	9.44	11.55	10.56	5.93
1981	20.78	11.57	13.18	12.65	9.56
1982 (projected)	24.42	11.03	13.35	12.39	9.23
Annual Percentage Rates of Growth, 1969-1981					
In dollars	11.6	17.6	15.4	15.7	15.7
In home currency	11.6	13.0	10.2	16.2	17.3

SOURCE: Donald F. Barnett and Louis Schorsch, Steel: Upheaval in a Basic Industry (Ballinger, 1983).

standardized, the ability of low-wage countries to enter the industry increases. 4/

Wage rigidities and high labor costs are frequently cited as one of the most intractable features of today's economy. In the steel industry, for example, hourly employment costs (as shown in Table 7) are the highest in the world. Steel workers in most countries are generally paid a premium, partly because of their high skill and productivity, but the differential is greater in the United States than elsewhere. In the 1980s, steel workers in the United States had total hourly compensation nearly 80 percent higher than the manufacturing average, while their French and German counterparts exceeded the manufacturing average by less than 20 percent.

4. See Raymond Vernon, "International Investment and International Trade in the Product Cycle."

It should be noted that wage comparisons can be misleading. First, differences in human capital, and therefore skill levels, make such comparisons difficult. Second, and more important, unit labor costs, which reflect the productivity of labor, are more significant as a measure of competitiveness than hourly earnings. As shown in Table 7, hourly employment costs for U.S. steelmakers actually grew more slowly from 1969 to 1972 than in other countries. At the same time, however, labor productivity was increasing faster elsewhere, particularly in Japan, putting the U.S. steel industry at an increasing disadvantage on a unit labor cost basis. Unlike steel, employment costs in many U.S. manufacturing industries fell during the 1970s, relative to foreign levels, as productivity and unit labor cost differentials narrowed internationally.

Externally, the revival of the European and Japanese economies after World War II meant that U.S. predominance in international trade could not continue indefinitely. As these countries regained their industrial capacity, the U.S. share of world markets had to decline. Moreover, after the devastation of the war, the Europeans and Japanese could rebuild their capital stocks to embody newer, more efficient techniques. The adoption abroad of the basic oxygen furnace in steel production is an often-cited example. In addition, when foreign countries started producing some of the products new to the postwar period, such as televisions, they were able to avoid large research and development expenditures by simply reproducing U.S. technology. The level of international competition has also increased as newly industrializing nations have enlarged their manufacturing capabilities in the last decade. Korean and Brazilian steel, for example, are now pushing into an already crowded steel market.

The composition of U.S. exports and imports for the period 1960-1980 is shown in Table 8. Despite the volume and share changes cited above, there has been considerable stability in the composition of exports over this period. Fluctuations stem largely from changing world conditions of supply. Agriculture, though a mature industry, has maintained its share of exports due, in part, to high productivity growth. Both exports and imports of machinery and transportation equipment have risen since 1960, reflecting rising world trade in these goods in general and the growing parity of Western Europe and Japanese producers. Within this category some high technology items, such as computers, have shown exceptional export growth, while others, such as metal-working and textile machinery, have shrunk in their share of exports. Imports of mineral fuels and transportation equipment have increased, largely because of increased petroleum and automobile imports.

TABLE 8. COMPOSITION OF U.S. EXPORTS AND IMPORTS, 1960-1980 (In percent of dollar value in each year) a/

	1960	1965	1970	1975	1980
Exports					
Food and live animals	13.2	14.7	10.2	14.6	12.8
Beverages and tobacco	2.4	1.9	1.6	1.2	1.2
Crude materials (inedible)	13.7	10.5	10.8	9.2	11.0
Mineral fuels and related materials	4.1	3.5	3.7	4.2	3.7
Chemicals	8.7	8.8	9.0	8.2	9.6
Machinery and transportation equipment	34.3	37.3	42.0	43.0	39.1
Other manufactured goods	18.7	18.0	17.9	15.6	17.8
Imports					
Food and live animals	19.9	16.1	13.5	8.8	6.4
Beverages and tobacco	2.6	2.6	2.1	1.5	1.1
Crude materials (inedible)	18.3	14.5	8.3	5.8	4.3
Mineral fuels and related materials	10.5	10.4	7.7	27.5	33.9
Chemicals	5.3	3.6	3.6	3.8	3.5
Machinery and transportation equipment	9.7	13.8	28.0	24.4	24.7
Other manufactured goods	30.3	35.1	33.3	24.9	22.9

SOURCE: U.S. Department of Commerce.

a. Numbers do not add to 100 percent because the categories are not exhaustive.

THE EXPANSION OF THE LABOR FORCE

The civilian labor force grew by 26.8 percent in the 1970s. Over the same period the proportion of the population participating in the labor force rose from 60.4 percent to 63.7 percent--largely because more women sought

jobs. 5/ This meant that the increase in employment during the 1970s was consistent with an increase in the rate of unemployment--a combination of trends that created difficult choices for national policymakers.

Most of the additional workers were absorbed into the service and government sector, many in low-productivity, low-wage jobs. Only 8.5 percent of the new jobs in 1970-1979 were in the higher paid manufacturing sector.

The expansion of the labor force coincided with the movement of younger workers from the postwar baby boom generation into the labor force. The percentage of workers under age 35 jumped from 37 percent in 1960 to 50 percent in 1977. 6/ This demographic shift has been linked to many of the problems of the economy, since younger workers tend to have lower productivity, lower earnings, and higher unemployment rates. In addition, they consume a different market basket of goods from the population average, including more education, housing, and first-purchase consumer durables.

THE OIL CRISIS OF THE 1970s

The Arab oil embargo and subsequent rise in oil prices had obvious and directly harmful effects on the U.S. economy. Higher prices for imported oil had to translate, in one form or another, into lower living standards for the nation as a whole.

Industries were affected unequally by the oil price increases, since much of the nation's capital stock had been designed to meet a different relative price structure. Energy-intensive production processes suffered more than others. Large adjustment costs were imposed on the economy, as a significant proportion of the capital stock was rendered obsolete. The higher oil prices increased the demand for fuel-efficient cars, enabling foreign producers to capture large portions of Detroit's automobile markets. The energy crisis also increased uncertainty about inflation in general and the future structure of prices. Uncertainty of this sort makes entrepreneurs less willing to undertake specialized capital investment, and encourages

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5. Department of Labor, Bureau of Labor Statistics.

6. See "Evaluation of the American Labor Market, 1948-1980," by Richard B. Freeman, in Martin Feldstein, ed., The American Economy in Transition (1980).

investment in short-term capital assets rather than in plant and equipment. 7/

PRODUCTIVITY AND CAPITAL FORMATION

One of the most significant economic events of the 1970s, and one of the most widely discussed, was the slowdown in productivity growth. Table 9 provides a breakdown of labor productivity growth rates. The decline in productivity growth rates has been broadly based, although in manufacturing it has been less than in the rest of the nonfarm economy.

TABLE 9. LABOR PRODUCTIVITY GROWTH RATES IN THE UNITED STATES, BY SECTOR, SELECTED PERIODS, 1947-1981 (Percent changes at annual rates)

Periods	Total Private Business	Total Nonfarm Business	Manufacturing
1947-1955	3.5	2.7	3.6
1955-1965	3.0	2.6	2.8
1965-1973	2.2	1.9	2.4
1973-1981	0.8	0.6	1.5

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics. See also Congressional Budget Office, The Productivity Problem: Alternatives for Action (1981).

Some of the causes of the productivity slowdown have already been reviewed. The exhaustion of technological possibilities as industries mature, the de facto depreciation of the capital stock due to the oil crisis, the expansion of the labor force, and the diffusion of investment abroad all

7. Martin Neil Bailey, "Productivity and the Services of Capital and Labor," Brookings Papers on Economic Activity, 1:1981, pp. 1-50.

account for some part of the decline. But these factors hardly account for all of the decline. Some of it may be attributed to the slow growth of the economy, which has led many industries to delay the adoption of new production techniques since their current equipment was able to satisfy the low existing demand. In this way, sluggish productivity and slow growth reinforce each other until the effects are felt throughout the economy.

One of the more important consequences of the slowdown in productivity growth is that U.S. manufactured goods must compete, both internationally and domestically, against foreign goods, some of which are experiencing higher rates of productivity growth. In Japan, for example, productivity in manufacturing grew 6.8 percent a year from 1973 to 1980. Japan has had the advantage of being a late starter in many industries, and could often acquire technology rather than develop it. It has also benefited from policies aimed at maintaining high rates of industrial change (except in agriculture).

Some of the decline in average U.S. productivity growth can be explained by the increased importance of services, where productivity growth is low (and difficult to measure), and even by the compositional shifts of employment among manufacturing industries. When labor shifts from high-productivity to low-productivity industries, its aggregate productivity falls even if the low-productivity industries have high productivity growth rates. The net effect of interindustry shifts of labor on productivity growth since the war has been positive, but has declined over the years. Interindustry shifts accounted for 0.47 percentage point of the aggregate productivity growth rate in the 1949-1965 period, but only 0.15 percentage point in the 1974-1978 period. 8/

As the United States shifted from a predominantly agricultural economy to a predominantly manufacturing one, labor moved from relatively low-productivity employment to high-productivity employment, even as rates of productivity growth were increasing in agriculture. The current situation is more uncertain. Productivity in the manufacturing sector is about equal to the average level of productivity for the economy as a whole. Sectoral and interindustry shifts will help determine future productivity changes. Higher-than-average productivity sectors include: communications; electric, gas, and sanitary services; and finance, insurance, and real estate. In

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8. Congressional Budget Office, The Productivity Problem: Alternatives for Action (1981), p. 116. See the same chapter for a general discussion of interindustry and intersectoral productivity levels and growth.

manufacturing, higher-than-average productivity industries include: tobacco; petroleum and coal products; and motor vehicles.

Closely connected to productivity growth is the rate of capital formation in the economy. Capital investment is one of the necessary elements in raising labor productivity since new plant and equipment often embody newer, more productive technology. The United States has, however, one of the lowest rates of gross investment among the world's industrialized countries, as shown in Table 10.

TABLE 10. GROSS FIXED CAPITAL FORMATION (As a percentage of gross domestic product)

	1960	1965	1970	1975	1980
United States	17.9	18.8	17.6	17.0	18.2
Japan	29.5	29.9	35.5	32.4	32.0
Germany	24.3	26.1	25.6	20.7	23.6
Total OECD Countries Minus United States	22.1	23.8	25.3	24.2	23.6

SOURCE: Organization for Economic Cooperation and Development (OECD).

More important, the growth rate of the net capital stock, after allowing for depreciation, has increased only slowly over the last decade. The net stock of capital is a more significant measure of potential economic strength than gross investment because it provides a better measure of usable plant and equipment. Most scholarly analyses have concluded that the recent growth rate trend has been downward. (See, for example, Table 11).

TABLE 11. RATES OF GROWTH OF THE CAPITAL STOCK, TOTAL AND EXCLUDING POLLUTION ABATEMENT CAPITAL, BY SECTOR, SELECTED PERIODS, 1948-78 (Average annual percent increases) a/

Sector	1948-1965		1965-1973		1973-1978	
	Total	Excluding Pollution Abatement Capital	Total	Excluding Pollution Abatement Capital	Total	Excluding Pollution Abatement Capital
Private Business	3.14	3.11	4.48	4.37	2.31	2.05
Private Nonfarm Business	3.24	3.21	4.59	4.47	2.37	2.09
Manufacturing	2.93	2.86	3.93	3.64	2.16	1.47

SOURCE: From J. R. Norsworthy, Michael J. Hayes, and Kent Kunze, "The Slowdown in Productivity Growth: Analysis of Some Contributing Factors," Brookings Papers on Economic Activity, 1979:2.

a. Computed using data from the Bureau of Economic Analysis. The aggregates are based on direct aggregation of capital stocks.

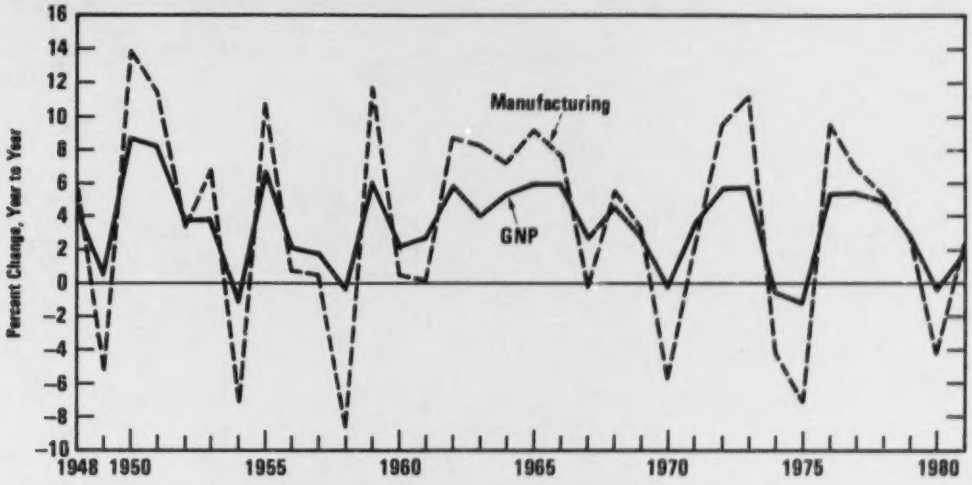
CYCLICAL SWINGS

Since 1948, the economy has experienced six recessions. Figure 1 shows changes in the growth rate of real output and of manufacturing output (which is even more volatile, on average, than the rest of the economy). Both total output and manufacturing output have shown apparent increases in frequency and amplitude of cyclical growth since 1969. The current period (1970-1981) resembles the highly volatile 1950s more than the stable growth years of the 1960s. (This may mean only that the absence of cycles in the 1960s was an anomaly.)

The 1970s were characterized by two major recessionary periods, in 1974-1975 and 1979-1982, and a third, milder downturn in 1970, all of which were accompanied by a significant decline in manufactured output. In all

Figure 1.

Percent Changes in Real Gross National Product and Manufacturing Output, 1948-1981



SOURCE: Department of Commerce, Bureau of Economic Analysis.

cases, the percentage changes in real growth experienced in the manufacturing sector were significantly greater than those experienced by the rest of the economy. Thus as the economy became more recession-prone in the 1970s, manufacturing was hit especially hard.

The cyclical swings of the economy in the 1970s reflected underlying events. The oil price shocks, for example, made it more difficult to control inflation, and higher inflation led ultimately to severe countermeasures that forced the economy into deeper recession than would otherwise have been tolerated. Similarly, the significant increase in the U.S. labor force made it more difficult to reach any target level of unemployment without unleashing inflationary pressure.

REGIONAL SHIFTS

Also characteristic of the 1970s were geographic movements in population and employment. The South and the West experienced exceptional rates of growth in population and manufacturing employment while the Northeast and Midwest lagged behind and even declined (see Table 12).

TABLE 12. REGIONAL CHANGES IN POPULATION AND MANUFACTURING EMPLOYMENT, 1976-1980 (Totals in thousands and growth in percent)

Regions	Population		Manufacturing Jobs	
	1981 Total	5-Year Growth	1981 Total	5-Year Growth
Northeast	54,813	0.0	5,330	2.5
New England	12,444	2.0	1,510	11.7
Middle Atlantic	42,369	-0.5	3,820	-0.7
Midwest	58,893	2.2	5,895	-2.5
Great Lakes	41,656	1.8	4,546	-4.7
Great Plains	17,237	2.6	1,349	5.9
South	71,452	12.4	5,813	11.9
South Atlantic	32,259	13.1	2,715	10.0
South Central	39,193	11.8	3,098	13.6
West	44,150	14.5	3,133	21.7
Mountain	11,694	19.1	574	27.8
Pacific	32,456	12.9	2,559	20.4
Total U.S.	229,307	6.8	20,171	6.1

SOURCE: Massachusetts Division of Employment Security.

Much of the regional displacement can be explained in terms of the industrial base within each region. Regions with old core manufacturing industries, such as the Middle Atlantic and Middle West, experienced job losses. In areas of the country associated with the steel industry, employment losses were particularly severe. States with more diversified economic bases, particularly in the expanding high-technology industries, did relatively better.

Regional shifts in employment also reflect other factors. Firms have expanded more in the South and West in part because labor is cheaper there. Areas have grown rapidly when they have demonstrated that they have a combination of resources and skilled labor that cannot easily be found elsewhere.

CONCLUSION

The problems confronting the U.S. economy have a variety of causes: declining productivity growth, high unemployment, declining industries, and cyclical instability. By historical standards, the economy's performance has been disappointing. On the other hand, it has not been bad in comparison with other industrialized countries, particularly those in Europe. From 1973 to 1980, real gross domestic product grew at an annual rate of 2.3 percent, compared to 2.2 percent in France, Germany, Italy, and the United Kingdom. 9/ Moreover, two of the main causes of the economic problems discussed above may have been removed: OPEC's bargaining power seems to have been weakened as new sources of supply have entered the oil market; and labor force growth has stabilized and should not be a problem for the foreseeable future.

The policy issue raised by these data is whether the traditional tools of fiscal and monetary policy are sufficient to address today's economic conditions. Those tools are generally thought to be better adapted to helping the economy recover from recession or slowing inflationary tendencies than to raising productivity or changing the composition of output. But if there is no solution to the productivity dilemma, economic growth may be limited by resource and production bottlenecks. If the United States cannot find new exportable products, growth may be limited by trade deficits. And even if fiscal and monetary policies succeed in stimulating long-term capital investment, they may not cure all of the structural problems. Where industries are technologically mature, the return on new investment may be too low to induce entrepreneurs to put financial resources into new plant and equipment.

These considerations have led some to propose encouraging new industries and aiding technological development in mature industries. Such policies would probably require a greater degree of government intervention in the economy than heretofore. The next chapter examines present federal policies toward industry. In the subsequent two chapters, alternatives to the present policies are defined and analyzed.

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9. Council of Economic Advisers, Economic Report of the President (February 1983).

CHAPTER III. U.S. POLICIES TOWARD INDUSTRY

While the United States does not have an explicit industrial policy, it has a variety of ad hoc policies toward industry in general. Many are aimed at redressing the kinds of problems discussed in Chapter II. Others are directed toward some other primary goal (such as national defense), so that their industrial consequences are a secondary result.

Some of these policies may have become outdated. U.S. antitrust policies, for example, were designed around the turn of the century, before domestic industries faced the substantial international competition they face today. Similarly, many banking regulations were a reaction to the stock market crash of 1929 and the subsequent bank failures. Military procurement, with its related research and development expenditures, reached a peak in the Second World War although it continues to be significant.

The market system remains, however, the basis of the U.S. economy. As a decentralized means of economic decision making, markets have the advantage of being consistent with American political preferences. They heighten the independence and responsibility of the individual, promote resourcefulness, and widen opportunities. Decentralization also means that decision makers are close to the objects of their decisions and presumably knowledgeable about them and able to adapt rapidly to changing conditions. Americans rely upon the market to determine economic activity except under special circumstances.

Exceptions to the rule include policies to achieve full employment, correct so-called market failures, regulate the way in which business is carried on, and deal with international trade. This chapter examines some of the ways in which current policies affect industrial activity in the areas of procurement, trade, research and development, economic adjustment, regional economic assistance, and competition. It describes the purpose and impact of those policies and the issues surrounding them. 1/

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1. This chapter does not attempt to provide a full listing of all the industrial support activities undertaken by the federal government, particularly of tax benefits and credit programs. For a fuller analysis of these activities and an examination of the federal budget for industrial support, see the forthcoming CBO publication on federal support of U.S. business.

PROCUREMENT

In fiscal year 1983, the federal government spent an estimated $58.2 billion on major equipment acquisitions, only $1.7 billion of which was for nondefense purchases. 2/ To this must be added much of the spending for research and development programs (discussed below), in the development of the space shuttle and many weapons systems. Such R&D shares the characteristics of acquisition programs insofar as it affects supplier industries. Together, these programs provide a major source of support for U.S. manufacturing industries.

According to Department of Defense data, in 1980 the defense share of industry output as a result of weapons purchases was 56.8 percent of aircraft engines and parts, 53.6 percent of shipbuilding and repairing, 32.7 percent of radio and television communication equipment, and 25.7 percent of engineering and scientific instruments. 3/

The impact of federal government acquisition programs is most significant during the early phases of a product's development. In 1954, the government accounted for 100 percent of all computer purchases. From the mid-1950s through the 1960s, the government bought over 40 percent of all semiconductor purchases. In 1980, for the first time, government purchases fell below 50 percent of total aircraft sales.

In addition to federal acquisition programs, the federal share of public works infrastructure expenditures (on highways, public transit systems, wastewater treatment works, water resources, air traffic control, airports, and municipal water supply) currently cost an estimated $24 billion a year. 4/ These programs are essential ingredients of long-term economic growth and have direct effects on the long-term viability of the nation's manufacturing base in addition to their short-term impacts on employment and local economic activity. Government policies, particularly infrastructure policies, often conform to the developing industrial structure, occasionally helping to shape the structure. A notable example has been the

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2. Budget of the United States Government, Fiscal Year 1984, Special Analysis D, "Investment, Operating, and Other Federal Outlays."

3. U.S. Department of Defense, Program Analysis and Evaluation, Defense Economic Impact Modeling System.

4. For further details on infrastructure and future needs, see Congressional Budget Office, Public Works Infrastructure: Policy Considerations for the 1980s (April 1983).

federal financing of canal, railroad, highway, and air transportation systems. Federal support for these projects aided regional economic growth (including suburbanization and westward development) as well as the growth of related industries such as autos, and of auxillary industries such as construction.

TRADE PROGRAMS

In response to the increasing importance of international trade, the federal government has developed several programs to promote exports and to aid industries and individuals affected by increased imports. Two of the most significant manufacturing export promotion programs backed by the federal government are the Export-Import Bank and the tax benefits associated with Domestic International Sales Corporations (DISCS).

Promotion of Exports

The Export-Import Bank provides loans and loan guarantees to foreign companies or countries so that they can buy American goods. It provides loans for transactions that would presumably otherwise not occur because of the size, terms, or risks of such loans. In fiscal year 1982, Eximbank incurred new obligations of $3.5 billion and net outlays of $763 million; new guaranteed loan commitments equaled $5.8 billion.

The DISC program attempts to increase exports through a system of tax deferrals. The object is to increase the rate of return for the exporter, much as does the system of value-added taxes in other countries. In the European Community, for instance, value-added taxes placed on all phases of production are rebated on exports to reduce production costs for exporters. However, despite the DISC program's similarity to other countries' export promotion programs, it has been ruled illegal under the General Agreement on Tariffs and Trade (GATT). The Administration is in the process of developing a system similar to DISC that abides by GATT rules.

A third program to encourage exports is contained in the 1982 Export Trading Act. It encourages the formation of businesses strictly for the export of goods and services produced by other firms. It is aimed at stimulating small and medium-sized U.S. firms to enter trading markets and is modeled after similar institutions in other countries. Over two-thirds of Japan's exports pass through export trading companies. The act specifically removes two obstacles to the formation of such companies by allowing them to be certified against antitrust prosecution and permitting banks to own and invest in these companies.

Finally, the Administration has recently proposed to create a new Department of Trade and Industry by combining functions of the Office of the Special Trade Representative and the Commerce Department. The purpose would be to concentrate government resources and policymaking machinery on trade policy problems.

Protection Against Imports

The other side of the trade promotion coin deals with imports, through measures to protect domestic firms against foreign competition and to assist them in adjusting to such competition. The government has taken steps in a variety of industries to slow down the flow of imports and to allow firms to adjust to change. In many cases, however, the mechanisms chosen serve to retard change rather than encourage it.

Among the programs are: the Trigger Price Mechanism for steel imports, and "voluntary" quotas for foreign steel exporters; indirect federal aid to the auto industry through deferral and revision of environmental and safety regulations, as well as direct aid in the form of negotiated "voluntary" restraints on Japanese auto exports and loan guarantees made available to the Chrysler Corporation; the Footwear Industry Revitalization Program, which included loans and loan guarantees, technical assistance, and other forms of support; assistance to the textile and apparel industries through high tariffs, negotiated international agreements, loan guarantees, and other technical assistance; and most recently, protection for the motorcycle and specialty steel industries, which have petitioned for assistance on the ground that they have been damaged by imports. Other industries now petitioning for assistance include the machine tool and semiconductor industries.

RESEARCH AND DEVELOPMENT

Research and development programs offer an example of what economists call positive externalities--that is, their social benefits exceed their private benefits. This is most true in the case of basic research, which does not allow the researcher to reap the full economic returns to the work and which is quite risky and expensive to undertake. As a consequence, the market tends to underinvest in basic research activities. The Congress has intervened to correct this situation by supplementing private support for research, particularly through the National Science Foundation. In addition, the government also funds mission-oriented R&D through agency and departmental budgets. In many cases, the federal government has supported very expensive development projects by building facilities and testing prototypes, particularly in defense and energy-related products.

Total federal government spending for all types of R&D was $38.7 billion in fiscal year 1983. In addition, approximately $2.4 billion in tax revenues were forgone as a result of legislation encouraging private firms and individuals to increase spending on R&D. Overall, about half of U.S. R&D funding has been provided by the government through its system of grants for university research, the use of government laboratories, subsidies for risky ventures, and support for specific projects. Government R&D support is concentrated among a few major industries, particularly those related to national security. Federal funds have played a major role in the development of defense-oriented industries such as aerospace, communication equipment, nuclear energy, and computers. Government R&D support has also played a major role in some civilian sectors of the economy--agriculture being the outstanding example. In fact, many of the most competitive industries have received the lion's share of federal R&D monies.

Many features of the tax system directly encourage private expenditures for research and development. For example, the investment tax credit, accelerated depreciation schedules, and some small-business incentives lower the cost of plant and equipment expenditures. This allows the results of R&D to be embodied more quickly in new products and processes. In addition, the tax code provides firms with the choice of immediately writing off the labor and materials cost of R&D activities, excluding capital equipment, or depreciating those costs over five years. The option to expense R&D costs in the first year provides a significant incentive to engage in R&D activities. The Economic Recovery Tax Act of 1981 provided more incentives for R&D by giving an incremental tax credit for additional R&D expenditures. 5/

ECONOMIC ADJUSTMENT

In cases of severe economic disruption, the federal government has initiated adjustment programs to ease the transition and to improve social welfare. These include trade adjustment assistance and labor training programs; economic conversion programs undertaken by the military for base closures; and programs for energy conservation and conversion. Such programs are industrial policy-oriented in that they address the goal of facilitating change by providing assistance to ease that change.

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5. This subject will be treated in more detail in a forthcoming CBO publication.

The Reconstruction Finance Corporation

Probably the most active program of economic adjustment undertaken by the federal government was the Reconstruction Finance Corporation (RFC). Originally established in 1932 to refinance failing banks and railroads, it became, under the New Deal, a major source of industrial financing for relief and recovery programs during the Depression and for procurement of strategic materials during World War II. When it was terminated in 1953, some of its financing functions were continued by other agencies such as the Commodity Credit Corporation, the Small Business Administration, the Export-Import Bank, and the Federal National Mortgage Association. Although originally run according to conservative banking practices, its later lending activities were often considered to be of more political than economic value.

Displaced Workers

The most recent initiative for providing adjustment assistance to displaced workers is Title III of the Job Training Partnership Act (JTPA) of 1982. The JTPA is a federally funded, state-administered program to provide job search, counseling, retraining, and relocation assistance to workers laid off with little chance of reemployment in their former jobs, to victims of plant closings and plant relocations, and to the long-term unemployed, especially older workers. The program is funded on a yearly basis at approximately $225 million. These resources, in combination with state matching funds, are expected to help about 100,000 displaced workers.

The JTPA largely replaces the Trade Adjustment Assistance Program (TAA), which from 1974 to 1983 was the major program for providing adjustment assistance to workers harmed by foreign competition. Although the TAA program was recently reauthorized by the Congress, its budget authority and program scope have been significantly curtailed in recognition of the benefits now provided by the JTPA. The TAA program now offers income replacement benefits, training and related services, and job search and relocation allowances to workers unemployed because of import competition. The income benefits are equivalent to a worker's state unemployment insurance benefit, and become available only after those benefits have been exhausted.

REGIONAL ECONOMIC ASSISTANCE

Since the Reconstruction Finance Corporation was disbanded in 1953, the federal government has undertaken several programs designed to aid

regional economic development with a collection of direct grants, technical support, and various forms of credit assistance. These programs, while often piecemeal and subject to strong political pressures, represent the government's most purposeful attempt to direct economic development below the national level.

Various programs administered by the Small Business Administration, the Farmers Home Administration, and other agencies were implemented to encourage economic development in particular geographical areas or among targeted populations. In most cases these programs were designed to balance economic growth between regions, between rural and urban populations, or between economically underprivileged populations and the general public.

In many ways the debate that preceded enactment of these programs mirrored the industrial policy debate today. Significant population and industry migration, and locally distressed economic conditions, provided the justification for targeted economic development assistance, although industrial dislocations and foreign competition were substantially less widespread than today. Frequently, programs were developed to balance economic opportunity between the prosperous and the underprivileged.

While significant capital expenditures were being made for infrastructure (most importantly, the interstate highway system), special programs were also targeted for underdeveloped regions (the Appalachian Regional Commission), for economically distressed areas (the Area Development Administration, now the Economic Development Administration) and for groups that lack full access to markets (the Small Business Administration).

In most cases, the identified need addressed by the original program grew during implementation and subsequent legislative review. Targeted recipients became more broadly defined, and the definition of distressed areas was loosened without clear economic rationale. Thus, the federal government became a full partner in many regional industrial development programs without the benefit of either national economic development goals nor a defined, coordinated federal role. Federal regional development assistance has been ad hoc and highly politicized.

COMPETITION POLICY

Since this nation's founding, the federal government has been given the task of providing the basic legal framework within which the economy functions. The Congress has a constitutional responsibility to regulate commerce, coin money, fix standard weights and measures, and promote the

progress of science and the useful arts. These basic activities are necessary for the full development of the market system. Some of these activities are quite clear and specific, such as fixing weights and measures. Others, such as regulating commerce, are more vague and general. All of them can be considered as industrial policy in that they affect economic welfare and competitiveness through government policy toward industry.

Two areas in which the Congress has taken action to regulate commerce are discussed below. One of these is regulating competition so as to deter the growth of monopolies and to keep highly competitive industries from destroying themselves. The other involves regulation to achieve social welfare goals.

Regulating Competition

One of the primary benefits of the private enterprise system is its capacity to deliver goods and services to consumers at least cost. It is only through competition, however, that consumers' needs will be served. The government's competition policy seeks to design incentives to promote competition and discourage collusion and other noncompetitive practices. In defining the rules of the competitive game rather than determining outcomes, it is behavior-oriented rather than results-oriented. In this respect, the U.S. antitrust laws differ from those of other industrialized countries.

In general, the informal "rules" of competition allow profitable firms to expand and prosper, while forcing unprofitable firms to contract and even go out of business. More formal rules have also been developed, such as those prohibiting combinations in restraint of trade, outlawing predatory pricing, and discouraging firms from cooperating rather than competing. There have been exceptions, some formal and others informal. One formal exception is the Webb-Pomerene Act, which allows an exemption from antitrust law for U.S. firms cooperating in international trade. More informal exceptions have been made, on a selective basis, where firms jeopardized by economic losses have been deemed too important to be allowed to fail--for example, the loans and loan guarantees provided by the government to Lockheed and Chrysler. This has created an ad hoc industrial policy by establishing the principle that the government should have sectoral economic goals and should intervene to pursue those goals.

Regulatory commissions have been used to regulate industries in which restrictive competitive practices may become harmful. Examples include the transportation industry (particularly trucking), agriculture, finance, and telecommunications. The Interstate Commerce Commission, for example, was created in 1887 in response to the destructive competition that had

taken place in the railroad industry. The Federal Communications Commission was established to regulate interstate communications, including allocations of radio frequencies and broadcast power. The myriad regulatory bodies overseeing the nation's financial markets--the Federal Reserve Board, the Federal Home Loan Bank Board, and the Securities and Exchange Commission, to mention a few--were created to alleviate market chaos and protect the public against destructive competition. Such competition, though often seemingly beneficial to consumers in the short run, may in the long run be harmful to both producers and consumers if it leads to instability and drives out small producers.

During the Depression the fear that too much competition could be harmful led to the New Deal program of industrial cooperation under the National Recovery Act (NRA). The NRA attempted to stabilize prices and promote production by encouraging self-regulation of industry. It allowed trade associations to draw up codes controlling prices and competition and providing for maximum work hours, minimum wages, and collective bargaining. The NRA was eventually declared unconstitutional by the Supreme Court on the grounds that it invaded intrastate commerce and delegated too much legislative power.

The weight of current thought is that there cannot be too much competition. In recent years, the trend has been to deregulate industries such as air transportation, banking, and communications that have operated under the guidance of regulatory commissions, in the belief that this will promote the benefits usually associated with competitive markets: innovation, lower prices, and responsiveness to the needs of consumers.

Social Regulation

Some government intervention is designed to ensure that markets reflect the public interest. Under some conditions the competitive market, if left to itself, will produce results that are detrimental to general social welfare. This is notably the case where there are negative externalities--that is, where social costs exceed the private benefits.

The classic example of a negative externality is pollution. Typically, a firm that can freely dump waste or by-products into the water, air, or soil without having to pay for the effects will not have an immediate interest in taking account of the social costs involved. The Congress, recognizing this situation, has passed environmental protection laws that require firms to bear at least some of the cost of this externality. Other major areas of social regulation include environmental safety and health, and consumer product safety. These laws create additional non-market costs for firms and may in some cases reduce their ability to compete.

CONCLUSION

Present federal policies toward industry--only a small proportion of which have been discussed above--are an amalgam of disparate policies. An industrial policy, if it is to have any meaning, must be conscious of its goals and coordinated in attempting to achieve them. In a review of industrial policy undertaken a few years ago by the Organization for Economic Cooperation and Development, the U.S. delegation noted that "in line with American economic philosophy, the federal administrative structure is not designed to carry out an active, coordinated policy of promoting industrial growth, and . . . therefore, federal intervention and coordination in this field are of an ad hoc character." 6/ Nothing that has happened since that statement was made has changed the character of U.S. policies toward industry.

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6. The Aims and Instruments of Industrial Policy (OECD, 1975).

CHAPTER IV. ALTERNATIVE INDUSTRIAL POLICY STRATEGIES

Current industrial policies, as described in the foregoing chapter, do not coherently or purposefully address the problems faced by U.S. industry. Other policies aiming at industrial revitalization have been offered for public debate. They cover nearly every traditional field of government policy, from money and banking to education and research.

This chapter summarizes three major strategies that have been proposed, leaving their evaluation to Chapter V. Each represents a general approach rather than a specific policy, and each includes a number of possible options. The options presented here reflect proposals that have been discussed in existing or pending Congressional legislation, or elsewhere in government circles. Not all of them are mutually exclusive.

The three strategies are: to work within the current policy framework; to reform current policy; and to establish new institutions that would address the structural problems of industry.

WORKING WITH CURRENT POLICY INSTRUMENTS

This alternative calls for no new policy reforms to encourage industrial growth, but instead would rely on economic recovery and private market adjustments to solve many existing problems. The underlying assumption is that most of the problems are short-term in nature, a result of the recent recession, and that the rest are amenable to market-oriented solutions. The basic thrust of current economic policy is to stimulate investment and incentives to work and save. 1/ These, in turn, are expected to lead to greater productivity, employment, and income.

Current policy relies on monetary and fiscal policy to maintain economic stability with low levels of unemployment and inflation. As a rule, it leaves the fortunes of specific industries to be determined in the marketplace. Some exceptions to the rule may be seen in recent protective measures for motorcycle and speciality steel producers, although the central thrust of policy probably remains untargeted growth.

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1. See the President's message, "America's New Beginning: A Program for Economic Recovery," February 18, 1981.

The Administration's specific program for economic recovery is based on breaking a cycle of negative expectations and revitalizing entrepreneurship. This is to be accomplished by reducing government spending, lowering marginal tax rates, reducing the burden of regulation, controlling the money supply, reducing the role of government in economic decision making, and giving greater latitude to private enterprise. In addition, the Administration has given industrial policy concerns increased emphasis, both within existing political institutions such as the Departments of Commerce and Labor, the Council of Economic Advisers, and the Office of the U.S. Trade Representative, and by creating a special Presidential Commission on Industrial Competitiveness.

REFORMING CURRENT POLICY

A second strategy would add to the standard tools of monetary and fiscal policy a range of measures designed to allow industry to adjust more effectively to changing conditions. These would modernize existing policies that were established under different economic conditions, and that may now have become impediments to growth and efficiency. The goal would be to make American industry more competitive by freeing it from many current restraints in the areas of antitrust policy, government regulation, international trade, and labor market policy.

Antitrust Policy

Antitrust laws have been criticized as placing U.S. firms at a disadvantage when competing with foreign firms that are not similarly constrained. Some also argue that in certain areas, particularly in research and development, joint activities among firms would be more economically efficient than competition (which may duplicate costs). 2/

The Justice Department and the Federal Trade Commission, which are primarily responsible for antitrust enforcement, view the consumer, not the corporation, as the ultimate beneficiary of the antitrust laws. Domestic producers, on the other hand, often see themselves as fighting for their economic existence against highly competitive international firms and feel hobbled by the antitrust laws.

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2. This subject is treated more fully in a forthcoming CBO publication on the federal role in research and development.

U.S. corporations also complain that the U.S. government is alone in its insistence on a high standard of competitive behavior among firms, while other national governments encourage private negotiations and some forms of cooperation among competing firms, particularly in international commerce. Japan's Depressed Industry Law, which allows for recession cartels, and Germany's similar encouragement of industrial "rationalization" are often mentioned. These policies, it is claimed, give foreign firms a competitive advantage against U.S. firms both here and abroad.

One problem is that U.S. firms must compete against state-owned firms, state-subsidized firms, or firms enjoying state authorization to engage in noncompetitive practices (as defined by U.S. antitrust law). U.S. law is limited in reaching all of the restrictive practices that foreign businesses may engage in elsewhere and that affect U.S. markets. Attempts to enforce U.S. laws against firms owned by sovereign governments have met with little success. Increasingly, issues involving competition between large national corporations have been treated as matters for international negotiation rather than for law courts.

A critical issue for antitrust policy is the proper response to cooperative activities by foreign companies that enable them to improve product quality, increase productivity, or lower cost. Proposals have been made to amend U.S. antitrust laws to permit companies to engage in joint ventures for research and development as well as to promote exports in other ways. These proposals raise the question of the extent to which current antitrust laws permit joint research and development.

In 1980, the Antitrust Division of the Department of Justice issued guidelines in this area. It noted that antitrust issues may arise in joint R&D ventures because "joint research may involve or create market-dominating technology, may be conducted by competitors or potential competitors, or may involve restrictive agreements concerning the results of the research." It found that joint research ventures of certain kinds would be acceptable, depending on: (1) their effect on existing and potential competition between the firms involved; (2) the duration, scope, and necessity of any restrictions ancillary to a project; and (3) whether a project led to the creation and abuse of market power by the firms involved.

These guidelines leave a great deal of uncertainty, which is increased by the treble-damage penalties that private plaintiffs may be awarded against firms that violate antitrust laws. Although the Antitrust Division has a business review procedure through which firms can get a decision before committing themselves to a project, it has been criticized because it requires firms to reveal their intentions earlier than they might like and does not guarantee sufficient protection to the proposed enterprise. Moreover, subsequent Administrations are not bound by these decisions.

Efforts are being made to resolve this problem. Several bills have been introduced in the Congress to reduce antitrust risk in joint R&D ventures. In general, they would give the Department of Justice authority to issue Certificates of Review protecting specified plans from both criminal prosecution and private treble-damage suits. In response to administrative changes, two groups of semiconductor and computer companies have already formed research ventures--the Microelectronics and Computer Technology Corporation and the Semiconductor Research Corporation. In addition, the Department of Justice recently granted approval to the Small Business Technology Group, using an obscure section of the Small Business Act as justification. 3/ The Administration has also proposed revisions of the antitrust laws aimed at strengthening U. S. competitiveness in world trade. These would reduce the amount of money damages that can be won in most civil antitrust suits, and increase patent protection.

Deregulation

Two thrusts have characterized the deregulation movement. One has been toward industries (generally non-manufacturing industries) that are subject to regulation of competition. There have already been major deregulatory efforts in transportation and communications. Further efforts are under way in financial services. The other course taken by deregulation has been to loosen social regulations--consumer protection, environment, job safety, energy, among others--which have been criticized as very costly to business. One often quoted but highly controversial study estimates the cost of compliance with social regulations to have been about $120 billion in 1980. 4/ Some see this area of regulation as unfair to small businesses, which are less able to absorb the costs.

Social Regulation. The critics of social regulation of business claim that it has grown to such a degree that the term "regulated industry" no longer has any distinctive meaning--all industry today is in some sense regulated.

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3. "Joint R&D Venture Is Approved," The Washington Post, September 21, 1983.

4. Murray L. Weidenbaum, Costs of Regulation and Benefits of Reform, Center for the Study of American Business, publication number 35 (November 1980). But see also William K. Tabb, "Government Regulation: Two Sides to the Story," Challenge (November/December 1980), for an alternative point of view.

During the 1960s and 1970s, the Congress passed a variety of social legislation aimed at occupational safety and health, and environmental and consumer protection. New regulatory institutions were established to oversee and administer the programs. Between 1970 and 1980, budget expenditures for social regulation rose in real terms from $0.5 billion to $2.6 billion. During the same period employment in federal social regulatory agencies rose from 9,700 to 66,400. One often-cited measure of the growth in regulatory rules issued is the growth in the size of the Federal Register, which expanded from 9,560 pages in 1960 to 74,120 pages in 1980. 5/

This tremendous expansion of social regulations has created a backlash of protest against the social and economic costs of compliance. Many industrial firms complain about the burden of the paperwork and other responses required to comply with regulations. The Congress has responded to some of this criticism, and the current Administration has made many attempts to reduce the burden. Further efforts in this direction are seen by some as necessary to increase productivity and efficiency.

Most regulatory reform proposals are based on the idea that the costs of regulatory programs are excessive compared to the benefits derived from them. Environmental programs in particular have been criticized as setting standards so high that their complete fulfillment requires expenditures far in excess of the marginal benefits. Some reformers would relax the standards to bring costs more in line with actual risks.

Another approach takes the view that the current system overprescribes the technology to be used in abating emissions or making work places safer. This approach would set performance goals that could be met by a variety of means, establishing incentives for meeting them, instead of requiring a specific engineering or technical solution.

The Administration has begun to approach regulatory reform by attempting to rationalize and improve the management of regulation. New procedures for clearing regulations and structuring decision making have been implemented. New regulations are now cleared at both the proposal and the final stages. Regulations already in existence are also identified for review. The cabinet-level Presidential Task Force on Regulatory Relief establishes policy and can also review specific regulatory initiatives. Many of these efforts have been controversial, and views of their effectiveness have varied.

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5. Regulation: Process and Politics (Congressional Quarterly, 1982).

Other proposals either now before the Congress or actively debated by reformers include: Congressional control over rule making; court review of rule making to put individuals and firms on an equal footing with regulatory agencies; greater use of cost-benefit analysis and regulatory impact statements; terminating programs, agencies or individual regulations unless Congress renews them (sunset provisions); a regulatory budget to control the costs of federal regulation; regulatory negotiation commissions to open lines of communication and facilitate rule making; and performance goals.

Financial Market Deregulation. Financial markets, which have already gone through major deregulation, are the subject of even further deregulatory efforts by some industrial policy advocates, who believe that antiquated banking laws limit financing and strategic coordination for industrial development. 6/ The Glass-Steagall Act, in particular, has been singled out. The act was passed in 1933 to restore public confidence in the financial stability of the commercial banking industry and to maintain the soundness of commercial banks by preventing them from dealing in securities. It limits the right of depository institutions to engage in securities activities and the right of securities firms to receive deposits, thus separating commercial from investment banking.

The act (actually four sections of the Omnibus Banking Act of 1933) was based on the idea that the connection between commercial banking and investment banking encouraged speculative activities and contributed to the bank failures of the Depression. As stated by the Supreme Court, "Congress acted to keep commercial banks out of the investment banking business largely because it believed that the promotional incentives of investment banking and the investment bankers' pecuniary stake in the success of particular investment opportunities was destructive of prudent and disinterested commercial banking and of public confidence in the commercial banking system." 7/

The two issues raised by Glass-Steagall in the context of an industrial policy are whether it unduly restricts investable funds and whether it contributes to myopia on the part of investors. The act, it is argued, artificially limits the potential pool of investment funds by limiting access to banking resources, while at the same time increasing the cost of securities transactions by excluding the commercial banks from a role that

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6. See, for example, Lester Thurow's testimony before the House Banking, Finance and Urban Affairs Committee, Subcommittee on Economic Stabilization, June 14, 1983.

7. Investment Company Institute v. Camp, 401 U.S. 634.

they can play in mobilizing financial resources for investment. Repeal of Glass-Steagall, it is claimed, would enhance competition in financial markets, thereby improving services at lower cost and encouraging efficient capital formation by broadening the market. Opponents of repeal argue that removing barriers and encouraging competition would not by itself create additional capital or put more money into investment, but would simply redivide the existing pool of investment funds.

In addition, reforming the Glass-Steagall Act would open the door to the creation of universal banks along the German or Japanese model. The large banking houses of Germany are "full service" banks in the broadest sense of the term. They are able to offer investment loans, buy and own securities, provide export credits, and act as industrial counselors to German firms. In fact, through their equity holdings and the closeness of their relationships with industry these banks are able to have a strong influence on industrial policy. If U.S. banks were allowed to engage in similar activities they would presumably develop a longer time horizon in evaluating the performance of creditor firms, which might be expected to have a positive effect on industrial growth. On the other hand, they might become too closely tied to the performance of a small number of firms. This could impair their judgment of those firms' creditworthiness, with the risk of more severe contractions if key firms became unprofitable.

Trade Policy

In general, industrial policies concerned with trade seek either to stimulate industrial production for international markets or to protect domestic producers from import competition. The rapidly increasing dependence of the U.S. economy on foreign trade, combined with the increasing use of industrial policies by U.S. trading partners, has heightened the sense of need for changes in trade policy.

Stimulation Programs. The United States relies primarily on two export promotion programs, the Export-Import Bank (Eximbank) and the Domestic International Sales Corporation (DISC). 8/ Current proposals call for increased funding for Eximbank should demand warrant it, and replacing DISC with a similar tax deferral system. The Export Trading Act, passed into law last year, is also expected to encourage exports by lifting restrictions that prevent small- and medium-sized firms and banks from establishing companies to trade in world markets.

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8. For a full discussion of these programs see Chapter III.

Perhaps the most important stimulus to exports would be lower and stabilized exchange rates. The recent high dollar exchange rates, and the volatility that has characterized exchange markets since the end of fixed rates, have led to many proposals for a new international exchange rate system. Such a change would, of course, require international agreement.

The dollar has been estimated to be overvalued by at least 20 percent in relation to its trade-determined value. 9/ This raises the price of U.S. goods in international markets, while lowering the price of imports by a like amount. The overvaluation of the dollar has been partly linked to exceptionally high U.S. interest rates, which are themselves partly a function of national economic policies. Many believe that the most effective way to lower U.S. exchange rates would be by addressing the interest rate problem through a reduction of chronic budget deficits.

Protection Programs. Proposals to protect domestic industry from import competition fall into two categories: the enforcement and implementation of existing trade laws, and new departures in trade policy such as domestic content legislation.

Many advocates of tougher import restrictions believe that the government already has sufficient authority to assist specific industries threatened by foreign competition, but does not use it vigorously. U.S. trade laws now provide for antidumping penalties and countervailing duties. In addition, the government can apply sanctions when the actions of foreign governments are found to be unfair to U.S. firms (Section 301 of the Trade Act) or when national security concerns are involved (Section 201).

A number of proposals have been made to protect key industries by requiring that imports contain a specified proportion of domestic materials or labor. Such "domestic content" measures would enable less competitive U.S. firms to capture a larger share of the U.S. market.

Labor Adjustment

One school of thought holds that the only industrial policy necessary is to smooth the cost of adjustment as the economy moves toward a new

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9. C. Fred Bergsten, "What Kind of Industrial Policy for the United States," Statement before the Subcommittee on Economic Stabilization, House Banking, Finance and Urban Affairs Committee, June 9, 1983.

industrial structure. This view would have the government assist dislocated workers who cannot readily find alternative employment, thus helping them through the transition. This view has much in common with the industrial policies of Germany and other European countries, which are oriented around labor and community dislocations.

There are three general approaches to aiding dislocated workers: providing services directly to workers to help them find new employment; subsidizing wages to encourage employers to hire more workers; and providing additional income to support workers through an adjustment period. 10/

Readjustment Services. Three types of readjustment services might be provided to aid dislocated workers: job search assistance, retraining, and relocation assistance. Job search assistance, which includes providing labor market information, job search training, and counseling, might help dislocated workers more easily find alternative employment. Worker retraining in particular can help workers acquire new skills. Relocation assistance might enable them to relocate to areas where jobs are more likely to be found.

Wage Subsidies. A second approach to aiding dislocated workers would be to subsidize their wages. This would reduce employers' net costs for hiring unemployed workers, thereby presumably encouraging additional employment of such workers. Wage subsidy programs have been used in Europe to assist labor market adjustment; firms are restricted from using such subsidies to hire new employees rather than maintaining or rehiring employees previously on the company's payroll.

Additional Income Replacement. The third approach to aiding dislocated workers is simply to provide them with additional income support beyond what is now available through unemployment insurance. This helps them during the readjustment period but in itself provides no incentive for readjustment--indeed, it may even cause some workers to postpone necessary readjustment decisions. The Trade Adjustment Assistance program is an example of such a program.

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10. The following discussion is based on Congressional Budget Office, "Strategies for Assisting the Unemployed" (December 1982) and Dislocated Workers: Issues and Federal Options (July 1982).

NEW INSTITUTIONS

The third approach to industrial policy calls for the development of new institutions. Proponents of this approach argue that present industrial problems are so new and qualitatively different from previous economic problems that they require new institutions and policies to address them. In addition, it is argued that worldwide industrial competition forces the United States to match the policy devices of other industrial countries with institutions of its own. This is the only one of the three approaches that qualifies as a true break from the past in creating a new, coordinated industrial policy. The other two can be viewed as proposing only marginal change within what amounts to a "no explicit industrial policy" framework.

This approach includes three distinct, but not mutually exclusive, options. They all share the view of industrial policy as an approach to a new class of problems, but differ in their mechanisms and targets. The three major options are:

- An information/consensus development agency;
- An executive-branch coordinating agency; and
- A financial institution.

The following discussion sketches the way these new institutions might function. Much of it deals with generic types rather than particular institutions, since many variations and combinations of each institution have been proposed. To the extent possible they have been presented in their lowest common denominator as pure types, rather than the mixed forms more frequently encountered in actual proposals.

An Information/Consensus Agency

Many believe that a new industrial policy would need only an information and consensus-building agency that would gather, synthesize, and disseminate information on American industry. It could, for example, assess the sectoral impact of government actions such as tax changes, infrastructure development, or R&D spending. It might also examine foreign economic policies and how these affect U.S. industries. It would address itself more to groups and individuals outside of government than to those inside government. Indeed, under most proposals this agency would be independent of the executive branch, perhaps resembling the Federal Reserve System in its structure. It would not, however, have any direct programmatic, regulatory, or policymaking responsibility.

At least four bills introduced in the 98th Congress would create a National Industrial Development Board for the purpose of formulating policy recommendations. H. R. 990 and S. 965, which are identical bills, would create independent boards for this purpose. H. R. 2991 would establish an independent Economic Cooperation Council which, in addition to collecting and analyzing economic data, would advise a separate National Industrial Bank also established by the bill. H. R. 3443 would also create a National Economic Cooperation Council to collect data, promote cooperation, and develop consensus economic policies.

The proposed information/consensus agency would be somewhat like Britain's National Economic Development Council (NEDC or Neddy) or Japan's Economic Planning Agency and Ministry of International Trade and Industry (MITI)--to the extent that MITI develops "visions" of future industrial development and creates information for private initiative. It would lack any of MITI's powers of enforcement, however. It would act largely as a consensus-building agency, with participation by labor, business, and government. It could also provide guidance to coordinate existing policies, somewhat like the coordinating agency discussed below but without its authority.

The need for such an agency is predicated on the idea that it could reduce information costs to firms and increase stability through lessened conflict. Such reasoning stands behind many of the frequently heard calls for tripartite commissions and a national dialogue on economic issues, such as those that led to the development of national consensus on economic policy at the end of World War II. 11/

A key question is whether it would be an outside agency, largely independent of government control but appointed by the President (similar to the Federal Reserve Board), or a semi-independent agency responsible to the Congress and the President (like the independent regulatory commissions), or an executive-branch agency (perhaps attached to the Council of Economic Advisers). This uncertainty underscores the fragility of the central mission of such an agency: to create and foster private initiative through its ability to convince others of the correctness of its analysis and the benefits of following its advice, without the power to enforce compliance. Some variations would link the agency to a source of funds enabling it to back up its analysis with money. However, its credibility and persuasiveness would still be key elements in its effectiveness.

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11. See, for example, Herbert Stein, "Agenda for the Study of Macroeconomic Policy" (American Enterprise Institute, 1983).

The effectiveness of such an agency, with or without financial backing, lies in its ability: to provide good long-term analysis of economic trends; to capture both national consensus on economic issues and translate and lead such a consensus into action programs; and to represent fairly the relevant economic interests of competing groups. The issue of where to place and how to structure such an agency so as to maximize its credibility and persuasiveness underscores the importance and political difficulty of consensus development, political representation, and leadership. An additional unresolved issue concerns the relationship between this institution and other organs of economic policy. Would, for instance, its macroeconomic and sectoral forecasts be those used for budget projections by the executive branch and/or the Congress? Would its sectoral projections provide a basis for other government programs? Would the Congress ratify its economic plans by establishing them as official goals? Many of these questions are unanswered in existing proposals.

A Coordinating Agency

A second type of institution may be described as an activist executive agency to coordinate and rationalize federal government programs affecting industry. The goal of such an agency would be to improve executive-branch decision making by reassigning program and budget authority, thereby forcing tradeoffs at different levels. For example, S. 121 would establish a Department of Trade and Industry to strengthen federal policymaking. H. R. 2288, H. R. 2630, and H. R. 3481 would establish similar executive departments. These proposals are predicated on the idea that the federal government affects industrial growth through a variety of actions, which should be coordinated to avoid duplication and conflict.

The coordinating agency is sometimes modeled after France's Ministry for Industrial and Scientific Development, as well as that part of Japan's MITI which actively supports industrial development. It might be an elite bureaucracy capable of making major decisions about the course of the nation's economic development, and--in some variations--carrying out those decisions by subsidizing (usually indirectly) favored activity. This agency could marshal and coordinate resources of the federal government to encourage, where necessary, investment, rationalization of industry through merger or disinvestment, guarantees of minimum prices and government purchases, expenditure of federal funds for research and development, and so on. It might also play a role in worker retraining and relocation programs, unemployment compensation, and other forms of assistance to labor. For example, the agency might be in a position to coordinate economic assistance to workers affected by growing imports resulting from trade competition. Alternatively, it might protect and encourage growing

industries, such as computers, and coordinate labor training programs to ensure that appropriately skilled workers would be matched with emerging job opportunities. The target industries might be determined by policy guidance from the Congress and the executive or from the information agency described above, with specific project criteria to be established based on those guidelines.

The Administration has recently proposed one variation of such an agency in its plan to create a cabinet-level Department of International Trade and Industry (DITI), although its proposal does not go as far toward direct guidance of industry as do some others. DITI would combine functions now found in the Commerce Department's International Trade Administration, other Commerce Department offices, and the Office of the U.S. Trade Representative. It would focus attention and coordinate decision making on trade policy issues, while providing an explicit organization for industrial policy concerns. The proposal does not call for the agency to acquire additional powers or budgetary authority.

Alternatives to the creation of a new cabinet department include: reorganizing existing departments to emphasize trade and competitive concerns; creating a super-cabinet agency similar to the Department of Defense, in which service Secretaries have independent responsibilities under the authority of the Secretary of Defense; or setting up a White House coordinating council similar to the now defunct Council on International Economic Policy (1973-1976), which provided coordination for international economic issues.

A Financial Institution

Several major proposals would establish a financing institution that would in essence be a national industrial development bank, or several regional development banks. At least six bills incorporating versions of the Reconstruction Finance Corporation have been introduced. In addition, S. 331 would create a National Investment Corporation, similar to a development bank, and H. R. 2991 would establish both an Economic Cooperation Council to collect and analyze information and a National Industrial Development Bank to provide long-term financing.

The proposals for a financial institution are often predicated on what are thought to be market failures: (1) the shortage of capital available to distressed firms or regions; (2) shortages of long-term capital; (3) imperfections in the availability of venture capital; and (4) the inability of troubled industries to reorganize themselves. Some supporters eschew a strictly economic rationale and argue that a national development bank is needed to

engineer solutions to problems that cannot be solved by markets alone, such as depressed communities, regions, or industries.

Many analysts have drawn on the Depression-era Reconstruction Finance Corporation (RFC) as a model for such an institution. The RFC was established to refinance failing banks and railroads by lending them additional funds. Later it also invested in the stock of troubled companies.

The RFC was run much as a bank, the primary difference being its ability to apply social criteria in approving projects. It was chartered and capitalized by the Congress and operated independently as an off-budget entity. Many current proposals follow that pattern closely. Proponents argue that a national industrial investment bank should be independent of political control, or at least widely representative of political constituencies (including, at a minimum, representatives of labor, management, and government). It should have adequate capitalization and the ability to raise additional money by borrowing, either through the Treasury or in private capital markets with governmental backing, although the amount of funding varies widely among the proposals. Some would have the bank offer loan guarantees or other incentives, including a variety of direct or indirect subsidies. Others would keep its financial base small, in order to force policy tradeoffs and limit its impact on the economy.

The key feature of such a financial institution would be its ability to target assistance to specific industries, or even firms within industries, to accomplish goals not supported by the market. Depending on its goals and project criteria, it could provide direct assistance to rising, declining, or other types of industries. It might even provide venture capital to new high technology firms, refinance the debt structure of older basic industries, or provide new financing to important industries or key firms (as the government did for Chrysler and Lockheed). Presumably it would set certain conditions on its assistance, relating to industry or firm performance in such areas as investment, wages, employment, and other aspects of business management.

In one version, the financial institution would be a standby facility of last resort. If a key firm or municipality (such as New York City) reached the brink of disaster, the bank could act as financier and broker, buying time for solutions and compromises. This option would translate current ad hoc policy, as established by the Lockheed, Chrysler, and New York City precedents, into a permanent policy.

CHAPTER V. EVALUATING THE OPTIONS

This chapter analyzes the potential benefits and hazards of the major industrial policy options, including those reflected in current legislative proposals. These options, defined in greater length in Chapter IV, are:

- Keeping to Current Policy. Rather than develop a new industrial policy, this option would use present monetary and fiscal tools to improve the nation's economic performance, relying on the long-term benefits of sustained recovery.

- Reforming Current Policy. This option would modify public policy to reflect current conditions. The reforms considered here concern antitrust policy, social and financial regulation, international trade, and the labor market.

- Creating an Industrial Policy Institution. An agency would be established under this option to develop and implement a new industrial policy. Three variations are considered here:

  -- An information/consensus agency that would bring government, labor, management, and other groups together to develop consensus on a new industrial policy;

  -- A coordinating executive agency with power to oversee the relevant executive departments and agencies and to coordinate or absorb their policymaking powers; and

  -- A financial institution that would provide capital, refinancing, or other monetary benefits to industries or firms in order to achieve specific industrial goals.

The following discussion deals with the most apparent advantages and disadvantages of each approach, without attempting to appraise any particular proposal. Most of the proposals introduced in the Congress so far lack the specifics necessary for a thorough evaluation. Moreover, there is little experience to go on, and most of it has been in foreign settings. This chapter seeks only to show how certain key criteria can be applied to the analysis of such options:

- What is the definition of current policy against which policy changes should be measured?
- To what extent can the economy's difficulties be resolved by current economic policy, principally monetary and fiscal policy?
- To what degree would a specific proposal tend to bring politics into economic decision making, and detract from economic efficiency?
- What is the chance that a particular strategy might fail?

CURRENT POLICY

The key issue the Congress must address in debating a specific industrial policy is whether any new policy is needed. It can be argued that the problems of the U.S. economy today are not qualitatively different from those of the past, and can best be addressed by current institutions and policies.

In some ways, present problems do not appear to be more severe than those of previous times. As shown in Chapter II, the structural changes that occurred in the period from 1920 to 1947 were greater than the current dislocations. Certainly some of the problems are new, at least for the postwar era, and to the participants they are no less painful than earlier transitions. One new development is the greater significance of international competition in today's economy, and another is the high proportion of the population that is employed or seeking employment. The very slowness of economic change may itself be a new problem. On the other hand, the institutions and policies for dealing with economic problems are much more sophisticated than they were, say, at the time of the Great Depression. While economic recovery cannot in itself be expected to solve all of the long-run structural problems facing U.S. industry, including chronic unemployment, it will no doubt diminish the severity of some of them.

Potential Advantages

The advantages of relying on current policy without further intervention rest partly on the contours of the recovery. Table 13 shows how certain broad indicators might be expected to change if the recovery persists through 1986. Rising output should be accompanied by falling inflation. Productivity should also show an upsurge. Moreover, continued recovery

TABLE 13. FIVE-YEAR ECONOMIC ASSUMPTIONS

	Actual	Estimate	Projections		
	1982	1983	1984	1985	1986
Real GNP (percent change, year over year)	-1.9	3.1	5.0	4.0	3.5
GNP Deflator (percent change, year over year)	6.0	4.5	4.8	4.8	4.8
Civilian Unemployment Rate (percent, annual average)	9.7	9.7	8.4	7.9	7.5
Three-Month Treasury Bill Rate (percent, annual average)	10.6	8.8	8.6	7.7	7.4

SOURCE: Congressional Budget Office, The Economic and Budget Outlook: An Update (August 1983), Table 3.

would allow some of the most severely affected industries, such as automobile and machine tool production, to recover from their very low 1982 output levels.

Relying on current policy would be consistent with a growing body of thought that holds that one of the major causes of recent industrial decline was a lack of competitiveness on the part of industrial managers, and that this may now have improved. 1/ The recent recession has forced many managers to become more competitive by cutting costs, reducing inventories, and in general managing their firms with an eye toward productivity improvement (the so-called "fundamentals"). 2/ The new climate should help spur economic performance.

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1. Robert H. Hayes and William J. Abernathy, "Managing Our Way to Economic Decline," Harvard Business Review (July - August, 1980).

2. See, for example, Sheila Cunningham, "How the Recession Is Giving Business a Better Chance for Profits," Business Week (December 27, 1982), p. 26.

One advantage of this policy option is its unobtrusiveness. It avoids the dangers inherent in increasing the level of politicization of economic decision making and it achieves reasonable results without enlarging the deficit, raising taxes, or creating new bureaucracies. This option reinforces the market economy's self-correcting features, particularly the ability to innovate and adapt to change without centralized direction.

Potential Disadvantages

The principal disadvantage of relying solely on current policy is that many long-term structural difficulties are not likely to disappear with the recession. Some forecasters expect economic growth to be slower in coming decades than in the recent past. 3/ Productivity growth rates are not expected to return to historical levels, and unemployment is expected to remain very high by postwar standards. This would leave scope for an industrial policy to address structural problems and aid businesses, workers, and communities in adjusting to long-term trends.

To the extent that current policy does not address structural factors, new jobs will tend to be in the low-wage, low-productivity service sectors, and blue-collar workers will continue to suffer high unemployment. Competitive difficulties in foreign trade are likely to persist at some level, and with them political pressure for tariffs, quotas, and other protectionist measures.

REFORMING CURRENT POLICY

This option includes a set of measures intended, singly or together, to improve the functioning of the economy and the performance of industry. They would modify antitrust policy, reduce regulatory burdens on industry, promote exports, and help workers adjust to changes in the labor market.

Potential Advantages

Proponents of these reforms cite a number of benefits that would be gained from them. First, some current policies are out of date and interfere with the long-term competitiveness of industry. For example, reform of the

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3. See Data Resources, Inc., U.S. Long-Term Review (Spring 1983). It projects real GNP growth as averaging 2.7 percent annually between 1983 and 2008, compared with 3.3 percent in the 25 years to 1981.

antitrust laws, particularly to allow for joint research and development, is advocated on the grounds that foreign competitors can undertake such joint research and that this may give them an advantage over U.S. firms, particularly in high-technology research. Similarly, those who would reform the banking laws argue that the separation of commercial from investment banking limits the funds available for investment and leads firms to take a short-term outlook. They also argue that the legal separation of commercial and investment banking is rapidly being overtaken by market changes in response to previous deregulation, and that these changes should be recognized in law. Such reforms would cost very little; in fact, the deregulation proposals would reduce the government's administrative costs.

Second, even if reforms of current policies did little to improve industrial performance, they would improve the administration of the policies themselves. Industry would be better regulated, and labor programs would be more efficient and effective.

Third, policy reform in the areas of trade promotion and banking reform would put U.S. firms on a better footing with foreign competitors. Export promotion would have obvious benefits for industries in direct competition with foreign producers, even if it did not translate into a net benefit for the whole economy. Banking reform would enhance the power of financial institutions and help their clients to compete better in international markets.

Finally, these options offer a way to address industrial problems without establishing new federal bureaucracies. Some (such as deregulation) would even take the government out of private economic decisions and increase the reliance on market forces.

Potential Disadvantages

The major disadvantage with a reform strategy is that it may be inadequate in its approach to industrial policy concerns. In some cases, such as banking deregulation and antitrust reform, any effect on industrial problems would likely be more a secondary than a primary result of the reform. Other reforms, as in labor policy, would address the symptoms of industrial problems more than the causes of them.

The reform options, as a group, suffer from not being comprehensive in their approach to industrial ills. They are not linked by any overarching view of the economy and its problems. Rather, they are only a cluster of measures that work at the margins of current policy.

Comments on Specific Reforms

Antitrust. In reforming antitrust policy, one must believe that some non-competitive activities are preferable to open competition, and that pooling industrial resources would offer net benefits from economies of scale greater than the gains from diversity and competition. This is credible, albeit open to dispute. Certainly in some countries, notably France, Germany, and Japan, this point of view prevails. If the sources and types of competition in the United States have changed substantially over the years, then it may be reasonable to allow antitrust exceptions based on those changes. Many, however, believe that efforts to foster vigorous competition have served the country well.

Banking. The option of reform in the area of financial markets, in particular, revocation of the Glass-Steagall Act, is based on the belief that such reform would ultimately increase the pool of savings available for investment and/or lengthen the time horizon of investors, leading to greater employment and economic growth. But it is not at all obvious that repeal of the Glass-Steagall Act would increase the pool of savings available for investment. The existing separation of commercial from investment banking may not in itself reduce the pool of financial resources, but merely divide the control over that pool. Neither is it obvious that the creation of universal banks on the order of the European model would lengthen the time horizon of bankers, investors, or business firms, which is probably more sensitive to interest rates and other market signals.

Social Regulation. While reform of regulatory practices in areas such as environmental protection or occupational health and safety may be desirable, the burden of such regulation does not appear to have been a major factor in U.S. manufacturing competitiveness. This country does not regulate businesses to a greater degree, or force them to spend more on health and safety, than do other industrialized nations. In fact, many foreign regulatory practices were borrowed from the United States.

Trade. Export promotion programs are predicated on the notion that creating greater sales in some product markets will add to employment and income. However, such programs are unlikely to have net positive benefits to the economy as a whole. 4/ This is particularly true of concessionary export financing. By shifting resources from one segment of the economy to another, and subsidizing foreign consumption, the government creates new burdens as it creates new benefits. New jobs may be created in promoted or

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4. David P. Baron, The Export-Import Bank: An Economic Analysis (Academic Press, 1983).

protected industries, but these may be offset by job losses in other sectors that are not likewise promoted. Under floating exchange rates, increases in exports in one sector result in currency appreciation that acts to decrease exports in other sectors and to increase imports. Export promotion programs also tend to be costly from the standpoint of the federal budget. In many cases, they only subsidize exports that would have occurred without the program.

Labor. Finally, labor adjustment programs can help the economy achieve higher levels of output and employment by speeding workers' adjustment to economic change. They can do this only to a limited extent, however, because the number of dislocated workers is relatively small and the number who are assisted in finding jobs is even smaller. Programs such as job search assistance and retraining are more likely to speed adjustment than simple income support programs, which may even retard adjustment.

NEW INSTITUTIONS

This section examines proposals for new programs and institutions. Since none of these institutions now exists, the discussion must be based on assumptions about the way they would work and the effect they would have on the economy. That is, what conditions must hold true for these institutions to be effective?

An Information/Consensus Agency

Proposals to establish an information/consensus agency are based on the idea that information itself helps to diminish risk and uncertainty in business. To the extent that agreed-upon "facts" about the future can be developed and that individuals, firms, and government policymakers believe and act on those facts, then the future will be less uncertain and action less risky. If such an agency could achieve consensus on a course of action it would establish a basis for investment and growth in output. In its consensus-building capacity it would follow the example of blue-ribbon national commissions such as the President's Social Security Commission and the President's Commission on Strategic Forces.

Potential Advantages. Compared to the other types of proposed new institutions, the information agency would entail the least risk of damage if it should fail. Since it would have no overt power to compel action, it would not interfere with the prerogatives of private decision making in the economic system. Its effectiveness would depend strongly on the public's willingness to follow the agency's lead. If it failed to build consensus and develop a following, it could be ignored without much danger.

Potential Disadvantages. The agency might not achieve anything, particularly if it had no financial resources to back up its decisions. Many national commissions have attempted to establish consensus and leadership through the strength of analysis alone, only to fail. The British National Economic Development Councils (NEDCs or Neddies), upon which this model is based, have been almost totally ineffective because they lacked power to compel compliance. The Neddies were themselves based on the French indicative planning system, but unlike the French model they had no resources to back up their decisions.

The viability of a purely information-oriented agency would depend on its ability to bring together a variety of groups, including labor, business, and consumers. Achieving responsible and fair representation would be difficult; achieving consensus and positive action would be even harder.

Finally, there is some possibility that a consensus agency, to the extent that it influenced investors and managers, would encourage conformity to a single view and inhibit independent action. It might even make adjustment to changing conditions slower and more difficult. Some analysts believe that consensus-building in Japan has been partly responsible for a slowness in technological innovation and new-product development. Japan's comparative advantage, thus far, has lain in copying and improving on the production of products developed elsewhere.

A Coordinating Agency

An effort to coordinate federal policies toward industry would probably require changes in some of the policies cited in Chapter III. It might also lead to greater expenditures if the agency used subsidies to achieve policy goals. More important for this discussion, however, are the general outlines of such an agency.

Potential Advantages. The advantages of an executive-branch coordinating agency would lie in its being a new voice in policy discussions, concerned with the impact of decisions on industry and with the establishment of greater consistency in policies toward industry. It would help to avoid policy conflicts, such as reducing trade adjustment assistance funding on the one hand while pursuing free trade on the other, which creates more demand for such assistance. If it served to reduce the number of policymakers responsible for industrial concerns, that alone might increase government efficiency and reduce administrative costs.

One further advantage of a coordinating agency is that it would help to focus attention and define industrial policy issues both inside and outside

of government. The establishment of a government agency lends legitimacy to the issues it deals with; by giving definition to a problem and focusing public and private resources on it, it creates the means for finding solutions.

Potential Disadvantages. Consistency in policy may be politically and administratively expensive to achieve. Some measure of competition among specialized agencies may be more helpful than designating a single responsible agency, which may be captured by special interest groups. A centralized agency might also become too bureaucratic and too interventionist in its support of specific industries, to the detriment of other sectors of the economy. Finally, if it led to the establishment of additional layers of coordinators, as some proposals suggest, it would raise administrative costs and might result in greater administrative confusion.

Examples of failures of such agencies abound. In Japan, MITI actually tried to reduce the number of automakers and inhibit their development. That the industry was able to circumvent MITI's position is a testimony to the strength of Japan's private economy rather than to MITI's foresight. MITI has also made more disastrous blunders, such as promoting a national petrochemical industry based on expensive naphtha, and overexpanding Japan's shipbuilding industry. French planners, too, have had more than their share of major errors, such as Plan Calcul's failure to create a competitive data processing industry. Even France's much-heralded Airbus is heavily subsidized and may never return an economic profit.

No U.S. government agency now has the authority or resources to reorganize the steel industry or provide financial support for the adjustment programs that may be a necessary part of such a reorganization. An industrial-policy coordinating agency might need such powers to be effective. Merely reorganizing existing agencies would not create such powers. Indeed, the main point may be that the President and the Congress are ultimately responsible for policy decisions. No reorganization can change or create policies not agreed to by the President and the Congress.

A Financial Institution

Proposals for a financial institution find their rationale in the limitations of the existing capital market and in the desire for political solutions to problems that cannot be solved by the market alone.

Potential Advantages. Such an institution would offer advantages if certain conditions were met. First, one must believe that recurring economic problems--specifically, those related to slowing industrial productivity and slower growth--have to do with structural difficulties in the

economy that lie outside the bounds of conventional fiscal or monetary policy, or cannot be corrected by the reforms of current policy discussed above. If so, there is a case for pursuing policies targeted at these structural difficulties, and for setting up an agency to handle them rather than tying up the Congress with such matters.

This solution presumes that the private economy cannot correct these difficulties on its own. For example, individual firms may not be able to perceive (or capture) the profits of producing new technologies that would benefit other manufacturers. Or certain basic manufacturing industries may not be able to overcome their present difficulties, with all their dislocating effects on workers and communities.

Potential Disadvantages. Probably the greatest drawback of a new financial institution would be its cost and its potential effect on capital markets. Proposals have suggested federally subscribed capitalization ranging from $2 billion to $12 billion, and would give the institution additional authority to raise capital from the public. Capital markets are quite large and could easily absorb a marginal shift in resources. However, as the cost rose, the possibility that the institution would disturb financial markets, misallocate resources, and create inefficiencies would increase significantly.

An additional disadvantage is that such an institution might further politicize the economic system. The danger lies not so much in the agency guessing wrong as in the possibility that its decisions would be a subject of negotiation with special interests. Such a tendency could in time undermine the market foundations of the economy.

Whether or not this appears to be a compelling danger depends on one's view of current policies toward industry. To some, the adoption of a targeted industrial policy would appear to go little beyond the current level of government intervention in the economy. As shown in Chapter III, the government already dispenses a wide variety of benefits to individual firms and industries through trade actions, regulatory provisions, procurement activities, and the like. To these it has added special programs such as those involving Lockheed, Chrysler, and the Penn Central. If all these activities are considered as constituting current policy, then the creation of a new institution need not add to the politicization that already exists if it replaces or rationalizes current programs. Indeed, it could in principle be used to reduce the overall level of benefits as well.

What Would the Financial Institution's Mission Be? The advantages and disadvantages offered by a government financial agency lending to or subsidizing industry may be seen more fully in terms of the mission it might

have--such as subsidizing the growth of new or "high-tech" industries or the restructuring of older, basic industries.

--Promoting growth industries. A policy of subsidizing growth industries might help to create jobs and maintain higher levels of output and employment in the future. New or "high-tech" industries often have relatively small firms and employ more workers per unit of investment than their more mature counterparts. To the extent that an industrial policy stimulated the expansion of new industries, it might increase employment. But this would not necessarily help workers displaced from declining industries if the new jobs required different and perhaps higher skills, or if the emerging job opportunities were geographically removed from the older industries.

Promoting growth industries might also help them increase their shares of international markets. This is seen as a defensive measure akin to those taken by other nations--for example, Japan with its electronics industry. It is also justified by the infant industry argument--that government aid can be of benefit in the first stages of an industry's growth. Certainly the U.S. computer and semiconductor industries benefited greatly from military procurement contracts in the 1950s and 1960s.

But such a policy might offer substantial disadvantages as well. First, it is not clear that government intervention is needed to promote growth industries. U.S. venture capital markets, which are the most developed in the world, provide substantial amounts of funds to new firms, which have also been very successful in raising capital through public stock offerings. Moreover, the resources available to U.S. firms may even be sufficient to keep them abreast with subsidized competition from abroad. The much-heralded Japanese supercomputer program, for example, is funded at a level equal to a small fraction of the research budget of International Business Machines (IBM). To the extent that growth industries need aid in research and development, they might be assisted through modifications of current federal programs without large-scale subsidization. Remedies are also available to protect new industries from subsidized competitors abroad.

A major disadvantage of large-scale government subsidies is that the resources must be drawn from some other part of the economy. Subsidies to growth industries are most likely to be at the expense of declining industries, which would intensify the problems of the latter.

Finally, setting up a financial institution to counter the policies of other governments might escalate the level of subsidy on all sides. Global overcapacity in certain industries is a real danger--such overcapacity exists, for example in the ethylene industry, which some governments have

chosen to expand. Sometimes changing circumstances can turn an apparent growth industry into a declining industry. The Japanese shipbuilding industry--originally targeted for expansion but subsequently rationalized and reduced in size following the 1973-1974 oil price shock--is a good example of such a reversal.

--Restructuring declining industries. An industrial finance agency might be able to pursue policies that private firms cannot. For example, a difficulty in some basic industries is that individual firms are tempted to keep capacity levels above those suggested by their market shares in case demand should grow. As a result, modernization investments are often diffused across too broad a range of plants and facilities to be fully effective. There is much evidence that this has been the case with steel. An agency concerned with restructuring such an industry would be able to coordinate capacity reductions and modernization programs. It could also enforce the mutual sacrifice necessary on the part of management, labor, and suppliers. This was the role taken by the government in its loan guarantees to Chrysler, and by the Municipal Assistance Corporation in the refinancing of New York City's debt. 5/

The disadvantages of such a mission lie in the tremendous political pressures such an agency would face, as well as its exposure to special-interest appeals. The emphasis of the agency could quickly shift from modernizing industries to preserving them intact. Modernization generally implies closing antiquated facilities, improving productivity, and, therefore, sacrificing some employment as was done at Chrysler, a fairly successful example of a government-industry modernization program where employment is now only half of what it was in the late 1970s. These losses in employment partly reflect automation and other changes that are inherent in improving productivity. Pressures to maintain employment levels could result in subsidies that would not achieve the benefits of modernization, whether measured in terms of productivity or of international competitiveness.

As with policies to promote growth industries, providing financial assistance to declining industries would draw resources from other parts of the economy. It might even deprive growth industries of the capital and labor necessary to sustain expansion.

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5. Felix Rohatyn has discussed this issue extensively. See "The Coming Emergency and What Can Be Done About It," and "Reconstructing America," New York Review of Books, December 4, 1981, and March 5, 1981, respectively.

Whether or not it would add to the politicization of the economy depends, in part, on how current policy is defined. In terms of laissez-faire, such an agency would obviously be obtrusive. But if current policy is taken as including the entire range of federal actions in this area, then such an agency might not represent a major innovation. In the past several years, for example, protection has been extended for basic steel, specialty steel, automobiles, and motorcycles, either through tariffs, quotas, or "orderly marketing agreements" in which other nations volunteer to limit their exports to the United States. Such devices mean a substantial cost to the economy since they raise the prices that U.S. producers receive for the protected goods. Limiting foreign steel, for example, raises the price of domestic steel. If trade actions of this type are considered an inevitable response to the problem of international competition, then substituting direct assistance to an industry might offer real advantages because the financial agency could secure concessions from diverse elements of the industry and bring about changes that would potentially reduce the overall subsidy. On the other hand, if current economic problems are viewed as transitory, then a special financing agency might create new problems by providing an incentive for firms to do so poorly that they would obtain government help. Managers faced with difficult and unattractive choices might opt for government support rather than choosing potentially superior but risky corporate strategies.

A financial institution would also incur two new risks. First, if it undertook the restructuring, promotion, or modernization of an industry, it would inevitably become involved in decisions regarding the location of production facilities. This would represent a new degree of intervention in the economy, since current policy has generally refrained from such decision making. Second, creation of a financial institution would institutionalize government intervention and could lead to such assistance being construed as a political "right." In other words, once a formal program of government assistance for industry was set up, private actors might turn to such assistance more readily than they have in the past.

CONCLUSIONS

An analysis of the claims of the major industrial policy alternatives does not provide a clear solution to the question of what, if anything, should be done. What is clear is that all the options carry as much risk as promise.

It is also clear that the discussion would be made easier if agreement could be reached on the goals of industrial policy. The current debate focuses too much on solutions and not enough on problems and goals. The latter need to be established first before solutions can be sought.

The costs of many of these proposals are hidden or are difficult to quantify. They ought to be made as tangible as possible. Many proposals would assist some industries or sectors at the expense of others. Not all the potential impacts can be foreseen, and it is essential to appraise the potential risks of policies not working out as hoped.

In a 1978 Ministerial Conference on Industrial Policy, the Organization for Economic Cooperation and Development recommended seven desiderata for governments to follow in establishing economic adjustment (industrial policy) programs. The seven rules bear careful scrutiny:

- Action should be temporary and should, whenever possible, be reduced progressively according to a prearranged timetable.

- Such action should be integrally linked to the implementation of plans to phase out obsolete capacity and reestablish financially viable entities, without, however, seeking to raise prices above levels providing an adequate return to efficient producers.

- The cost should be made as evident as possible to decision makers and the public at large. Careful attention should be paid to the cost to consumers of action which raises prices, to the cost to taxpayers, and to the effects of subsidized competition on employment elsewhere.

- Where public funds are being injected into the private sector, it is desirable that private risk capital should be involved.

- Assistance given on a company-by-company basis should be framed so as to provide an incentive for improved management practices, notably by ensuring sufficient domestic and international competition.

- Where the primary objective is to support employment in particular regions or towns, consideration should be given to action that can benefit any eligible company in the area concerned, rather than only those in financial difficulty.

- While recognizing that governments must pay due regard to the interests of national security, care should be taken to see that arguments based on considerations of self-sufficiency should not be misused to justify measures for protection and support. 6/

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6. Organization for Economic Cooperation and Development, The Case for Positive Adjustment Policies (June 1979).